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**Exam Code: 70-488**

**Exam Name: Developing Microsoft SharePoint Server 2013 Core Solutions**



**Test Inside**  
*Easiest Way To Pass It Exams*

The logo features the words "Test Inside" in a large, bold, sans-serif font. "Test" is white and "Inside" is a light green color. Below this, the tagline "Easiest Way To Pass It Exams" is written in a smaller, italicized, light blue font. The entire logo is set against a dark blue rectangular background.

## Testlet 1

### Consolidated Messenger

#### Intro

- **Business Scenario:**

You are the lead architect, developer, and web administrator of SharePoint 2013 for your company, Consolidated Messenger. Consolidated Messenger is a national company with hundreds of franchises.

Consolidated Messenger focuses on bicycle- based courier services in metropolitan areas.

Consolidated Messenger sells franchises to franchisees. Franchisees have three user types:

User	Role
Franchise Manager	Responsible for managing the franchise
Franchise Employee	Responsible for managing accounts and setting pick-up and drop-off locations for couriers
Courier	Responsible for picking-up and dropping off packages

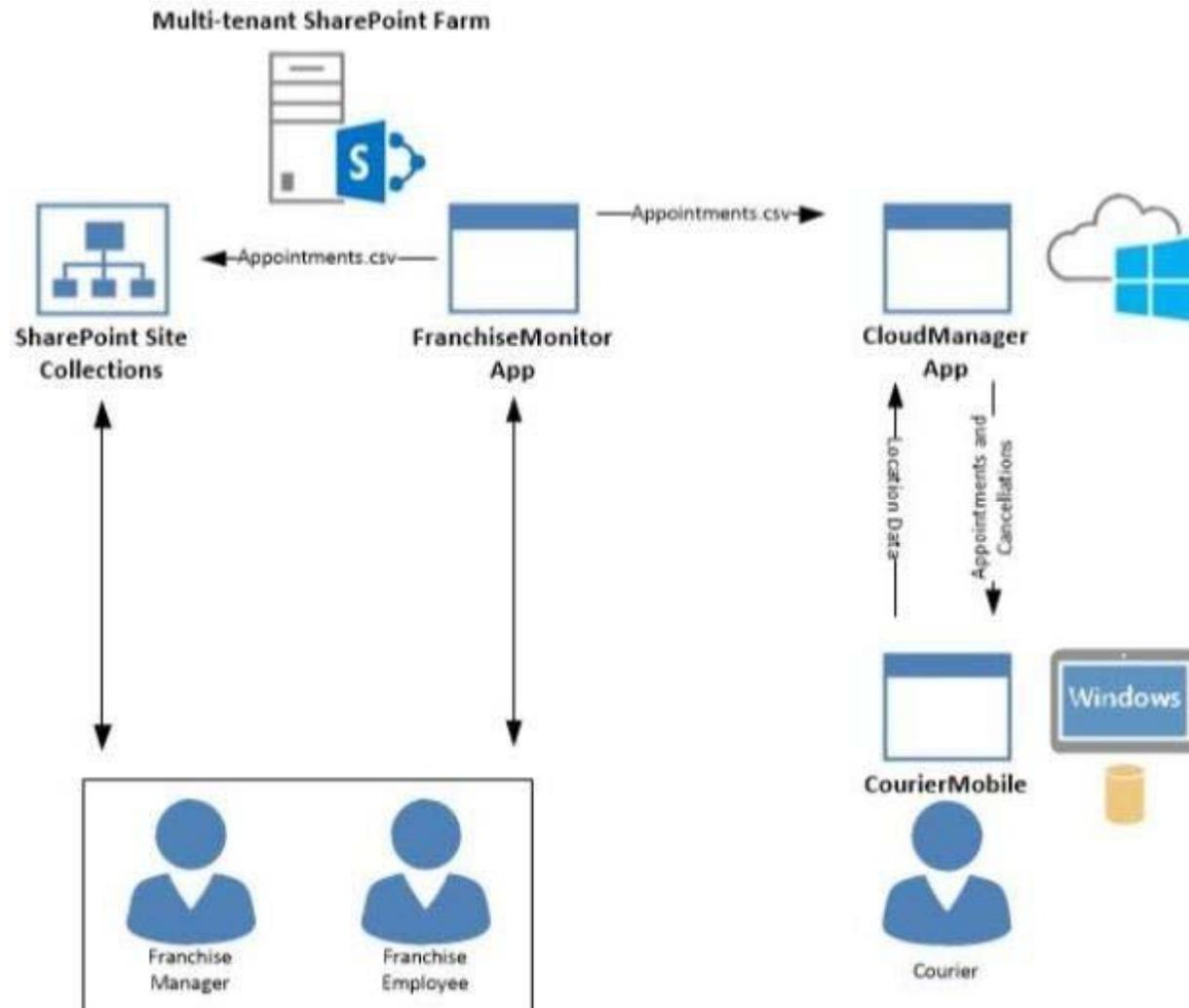
- **Technical Scenario:**

When a franchisee purchases a franchise, they are provided with:

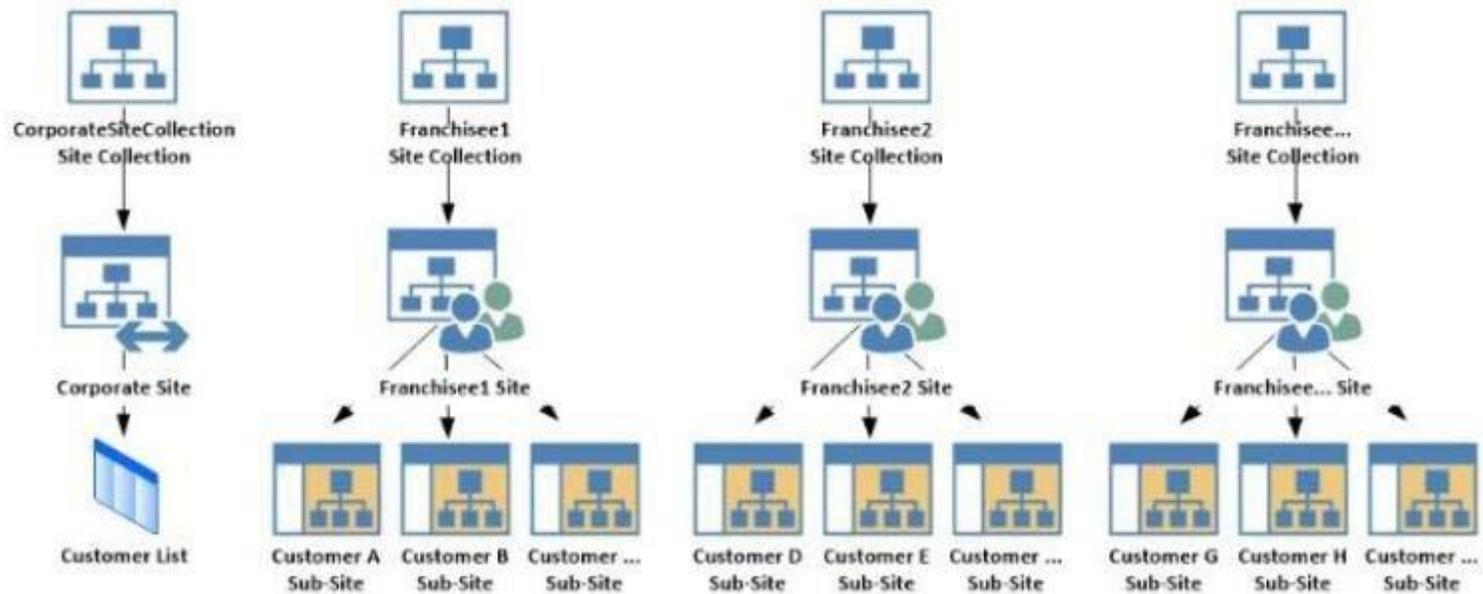
- Access to Consolidated Messenger's SharePoint 2013 multi-tenant farm located at <https://sp.consolidatedmessenger.com>
- Access to a Customers list in the Corporate site collection, named CorporateSiteCollection, which includes a list of all Customers across all franchisees
- A single site collection for each franchisee, named FranchiseeSiteCollection
- An unlimited number of customer subsites for each franchisee
- Consolidated Messenger has funded the creation of three apps.

App Name	Purpose
FranchiseMonitor	Used by franchisees from their franchise locations to monitor the progress of the bicycle couriers
CourierMobile	Used by bicycle couriers to perform their day-to-day function of receiving and delivering packages
CloudManager	Used to perform management of bicycle couriers, their routes, and their schedules

▪ Solution Architecture:



▪ Site Collection Structure:



- **SharePoint Farm Design:**

My Sites are not created for each Franchisee unless they are requested.

### Requirements

- **Business Requirements:**

User	SharePoint Access
Franchise Manager	<ul style="list-style-type: none"> <li>• Franchise Managers are site collection administrators for each franchise.</li> <li>• Franchise Managers may only access their site collection settings and not the settings of the web application.</li> <li>• Franchise Managers must be able to add users to a site in a People Picker control based on claims.</li> <li>• Franchise Managers must be able to search for claims by using the type-in control of the claims picker. The claims must be displayed by using a flattened structure.</li> </ul>
Franchise Employee	<ul style="list-style-type: none"> <li>• Franchise employees are customer subsite owners for each franchise.</li> <li>• Franchise employees must be able to read from the Customers list in the CorporateSiteCollection.</li> <li>• Franchise employees must have complete control over the customer subsites that is assigned to the franchise.</li> </ul>
Courier	<ul style="list-style-type: none"> <li>• No SharePoint access</li> </ul>

▪ **Technical Requirements:**

Each Franchise site collection must include a SharePoint document library to store CSV files.

**FranchiseMonitor App**

▪ **Application Design:**

Franchise employees use Microsoft Excel 2013 to create a list of pick-up and dropoff locations for each bicycle courier for each day.

The spreadsheet is named The FranchiseMonitor app must allow a Franchise employee to upload Appointments.csv.

▪ **Business Requirements:**

The FranchiseMonitor app must allow a Franchise employee to upload Appointments.csv to a SharePoint document library in each Franchisee site collection, and send Appointments.csv to the CloudManager app.

▪ **Technical Requirements:**

- The FranchiseMonitor app must display the courier's location on the bicycle courier's microfeed on the SharePoint farm if the courier has remained

stationary for more than three minutes.

- The FranchiseMonitor app must be listed on the Site Contents page of the host web.
- The FranchiseMonitor app must use claims-based authentication, once launched, to authenticate the franchisee against an API provided by Margie's Travel.
- The FranchiseMonitor app must be deployed to all site collections by the SharePoint administrator.
- The FranchiseMonitor app must be immediately available to be installed on websites within the tenancy on a website-by-website basis to any tenant contained in the SharePoint farm.
- The FranchiseMonitor app must be able to create lists within SharePoint to store records of the CSV files so that they may be sent to the CloudManager app.

## **CourierMobile App**

### ▪ **Application Design:**

- Each bicycle courier for each franchise is provided a Microsoft Surface Pro device with LTE. Most bicycle couriers do not return their Microsoft Surface Pro devices back to their franchise locations nightly.
- The CourierMobile app runs on the bicycle courier's Microsoft Surface Pro device.
- Margie's Travel provides an API to enable external developers to authenticate by using OAuth and claims-based authentication. Many couriers are members of Margie's Travel.
- The CourierMobile app receives Microsoft Outlook appointments and Outlook appointment cancellations from the CloudManager app. The appointments include the address of the location for pick-up or drop-off.

### ▪ **Business Requirements:**

- The CourierMobile app must display a Bing map to display route data when Outlook appointments or appointment cancellations are received.
- The CourierMobile app must capture the location of the Microsoft Surface Pro device on a regular interval. This data must be captured regardless of whether the device has connectivity.
- The CourierMobile app must be able to connect to the SharePoint Customers list and verify whether the account belongs to the franchisee to avoid pickups or deliveries to customers that do not belong to the franchisee. When the CourierMobile app accesses the Customers list, it must only read its contents with the minimum permissions necessary.

### ▪ **Technical Requirements:**

- The CourierMobile app must provide the ability to authenticate by using the courier's Microsoft account or the Margie's Travel API .
- The CourierMobile app must include a custom sign-in page that includes branding from Consolidated Messenger and Margie's Travel, based on the authentication provider selected by the user.
- The CourierMobile app must be able to capture more than 30 million data points of location data daily as they occur and upload the location data to the cloud when connected to the Internet.

## **CloudManager App**

### ▪ **Application Design:**

CloudManager processes two sets of data:

- Updates to the list of appointments received from the FranchiseMonitor app
- Geo-location data received from the CourierMobile app

- **Application Requirements:**

The CloudManager app must implement business logic that parses Appointments.csv and geolocation data and sends Appointments or Appointment cancellations to the CourierMobile app.

- **Technical Requirements:**

- The CloudManager app must elastically scale to capture courier location data as the number of bicycle couriers increases or decreases.
- The CloudManager app must process bicycle courier location data from a data store capable of storing more than 30 million items.

### **Solutions Code**

- **MyClaimsProvider.cs:**

```
CP01 [SharePointPermissionAttribute(SecurityAction.LinkDemand, ObjectModel = true)]
CP02 [SharePointPermissionAttribute(SecurityAction.InheritanceDemand, ObjectModel =
true)]
CP03

CP04     public class MyClaimsProvider : Microsoft.SharePoint.Administration.Claims.SPClaimsProvider
CP05     {
CP06         public abstract String Name;
CP07
CP08         protected abstract void FillSchema(...);
CP09         protected abstract void FillClaimTypes(...);
CP10         protected abstract void FillClaimValueTypes(...);
CP11         protected abstract void FillEntityTypeTypes(...);
CP12
CP13         public abstract bool SupportsResolve;
CP14         protected abstract void FillResolve(...);
CP15         protected abstract void FillResolve(...);
CP16
CP17         public abstract bool SupportsSearch;
CP18         protected abstract void FillSearch(...);
CP19
CP20     }
```

- AppManifest.xml for Franchise Monitor app:

```
AM01 <?xml version="1.0" encoding="utf-8" ?>
AM02 <App xmlns="http://schemas.microsoft.com/sharepoint/2012/app/manifest"
AM03     ProductID="{4a07f3bd-803d-45f2-a710-b9e944c3396e}"
AM04     Version="1.0.0.0"
AM05     SharePointMinVersion="15.0.0.0"
AM06     Name="FranchiseMonitor"
AM07 >
AM08   <Properties>
AM09     <Title>Franchise Monitor App</Title>
AM10     <StartPage>~remoteAppUrl/Home.aspx?{StandardTokens}</StartPage>
AM11   </Properties>
AM12
AM13   <AppPrincipal>
AM14     <RemoteWebApplication ClientId="1ee82b34-7c1b-471b-b27e-ff272accd564" />
AM15   </AppPrincipal>
AM16
AM17   <AppPermissionRequests>
AM18     <AppPermissionRequest Scope="http://sharepoint/content/sitecollection/web/
AM19     list" Right="Write"/>
AM20   </AppPermissionRequests>
AM20 </App>
```

## QUESTION 1

### Question 1

You need to ensure that the CourierMobile app determines whether the franchisee owns the account.

What should you do?

- A. Use OAuth and App only security. Request the Read right from the http://sharepoint/content/sitecollection/web/list scope URI.
- B. Use OAuth and App+User security. Request the Read right from the http://sharepoint/content/sitecollection scope URI.
- C. Use SPSecurity.RunWithElevatedPrivileges to connect to SharePoint and read from the Accounts list in the site collection.
- D. Use the SharePoint user credentials of the bicycle messenger to connect to SharePoint and read from the Accounts list in the site collection.

**Correct Answer:** A

**Section:** [none]

## Explanation

### Explanation/Reference:

\* From scenario:

Courier - no SharePoint access.

### Business Requirements

The FranchiseMonitor app must allow a Franchise employee to upload Appointments.csv to a SharePoint document library in each Franchisee site collection, and send Appointments.csv to the CloudManager app.

The FranchiseMonitor app must display the courier's location on the bicycle courier's microfeed on the SharePoint farm if the courier has remained stationary for more than three minutes.

The CloudManager app must implement business logic that parses Appointments.csv and geo-location data and sends Appointments or Appointment cancellations to the CourierMobile app.

The CourierMobile app must be able **to connect to the SharePoint Customers** list and verify whether the account belongs to the franchisee **to avoid pickups or deliveries to customers that do not belongs to the franchisee**. When the CourierMobile add accesses the Customers list, it must only read its contents with the minimum permissions necessary.

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*Sam/Anonymous: Answer C*

*Niki: Answer D*

*LWilson from United States - Nov 29, 2013:*

C is wrong because SPSecurity.RunWithElevatedPrivileges only works with server side code that resides on the SharePoint farm and runs using the account that the web application in IIS is configured for. CourierMobile app clearly doesn't run with that account.

Correct answer A Use Oauth and app only security. Request the read right from the web/list scope uri.

## QUESTION 2

### Question 2

A franchisee deletes several sites from the franchise's site collection. The franchisee site collection administrator must recover the sites. You need to instruct the franchisee site collection administrator on how to access the page to recover the sites.

What should the site collection administrator do to get to the appropriate page?

- A. Select General Settings for the Web Application in Central Administration and change the second stage Recycle Bin settings to 100 percent.
- B. Select General Settings for the Web Application in Central Administration and change the first stage Recycle Bin settings to 0 days.
- C. Select the Recycle Bin on the Site Settings page. Choose the appropriate sites and select Restore Selection.
- D. Select the Recycle Bin in the Quick Launch page. Choose the appropriate sites and select Restore Selection.

**Correct Answer: C**

**Section: [none]**

**Explanation**

**Explanation/Reference:**

Anon/Sam: Answer A

**QUESTION 3****Question 3**

You need to ensure that the CloudManager app can write route progress check-ins to the courier's microfeed.

What should you do? (Each correct answer presents part of the solution. Choose all that apply.)

- A. Ensure that SP.RequestExecutor.js can be accessed in a browser window with no errors.
- B. Ensure that the CloudManager app has the Manage permission request scoped to the URL for the franchisee's My Site.
- C. Ensure that the MySite host is provisioned for each franchisee.
- D. Ensure that all cookies are made available between the My Site and the CloudManager app domain.
- E. Ensure that the CloudManager app has the Write permission request scoped to the URL for the franchisee's My Site.
- F. Ensure that SP.UserProfiles.js can be accessed in a browser window with no errors.

**Correct Answer:** ADEF

**Section:** [none]

**Explanation**

**Explanation/Reference:**

```
$.getScript(scriptbase + 'SP.Runtime.js',  
  function () {  
    $.getScript(scriptbase + 'SP.js',  
      function () { $.getScript(scriptbase + 'SP.RequestExecutor.js', printAllListNamesFromHostWeb); }  
    );  
  }  
);
```

```
function printAllListNamesFromHostWeb() {  
  var context = new SP.ClientContext(appweburl);  
  var factory = new SP.ProxyWebRequestExecutorFactory(appweburl);  
  var context.set_webRequestExecutorFactory(factory);  
  var appContextSite = new SP.AppContextSite(context, hostweburl);  
  ....  
  ....  
}
```

<http://www.mavention.com/blog/sharePoint-app-reading-data-from-host-web>

From scenario:

## Business Requirements

The FranchiseMonitor app must allow a Franchise employee to upload Appointments.csv to a SharePoint document library in each Franchisee site collection, and send Appointments.csv to the CloudManager app.

The FranchiseMonitor app must display the courier's location on the bicycle courier's **microfeed** on the SharePoint farm if the courier has remained stationary for more than three minutes.

The CloudManager app must implement business logic that parses Appointments.csv and geo-location data and sends Appointments or Appointment cancellations to the CourierMobile app.

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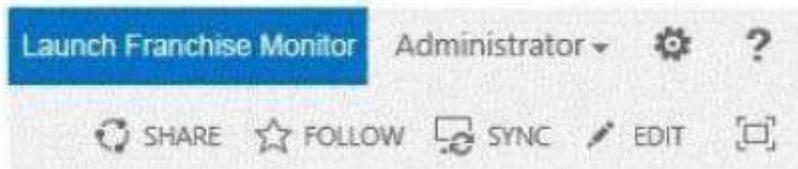
*Sam/Anonymous/Niki: Answer ABDE.*

## QUESTION 4

### Question 4

Some franchisees want to launch the FranchiseMonitor app from a link named Launch Franchise Monitor that is displayed next to the name of the user who is currently logged in.

Other franchisees do not want to have the link present. The link must be contained within the same out-of-the-box control, as shown in the screenshot below:



You need to configure support for the Launch Franchise Monitor link.

Which four actions should you perform in sequence?

(To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

**Select and Place:**

Answer Area

Add a new user control named SuiteLinksDelegate.

Ensure that the class inherits from the **WebPart** class and overrides the RenderControl method.

Add a new code module named SuiteLinksDelegate.

Create a new SharePoint 2013 Empty Project.

Add a reference to the control to the AppManifest file.

Add a reference to the control to an empty elements file.

Ensure that the class inherits from the **UserControl** class and overrides the Render method.

Create a new App for SharePoint 2013 project.

Correct Answer:

	Answer Area
	Create a new SharePoint 2013 Empty Project.
Ensure that the class inherits from the <b>WebPart</b> class and overrides the RenderControl method.	Add a new user control named SuiteLinksDelegate.
Add a new code module named SuiteLinksDelegate.	Ensure that the class inherits from the <b>UserControl</b> class and overrides the Render method.
	Add a reference to the control to an empty elements file.
Add a reference to the control to the AppManifest file.	
Create a new App for SharePoint 2013 project.	

**Section: [none]**

**Explanation**

**Explanation/Reference:**

<http://www.learningsharepoint.com/2013/02/10/addremove-links-in-top-suitebar-skydrivesitesnewsfeed-in-sharepoint-2013/>

<http://www.codeproject.com/Articles/569897/UsingplusDelegateplusControlplusinplusSharepoint>

1. Add the User control to project.
2. Add a Module to project which will take care of adding the user control to Delegate control. I named it as "DelegateModule". Delete sample.txt file and modify the Elements.xml to resemble something like this.
3. Create a feature and add "DelegateModule" to it.

<http://mihirsharepoint.wordpress.com/2012/11/15/create-delegate-control-in-sharepoint/>

1. open the visual studio and create an empty project.
2. Add the **control templates** mapped folder, visual webpart, empty element like below image.
3. Add the code to the designer surface of the visual webpart
4. In elements.xml file under the empty element you added, add the following code
5. Save the changes and deploy into the site.

-----  
*LWilson from United States - Nov 29, 2013:*

Correct answer: Create a new Sharepoint 2013 empty project, Add a new user control called suitelinksdelegate, ensure the class inherits from the UserControl class and overrides the render method, add a reference to the control to an empty elements file.

Sam: Answer

Create a new App for SharePoint 2013 project.

Add a new code module named SuiteLinksDelegate.

Ensure that the class inherits from the **UserControl** class and overrides the Render method.

Add a reference to the control to an empty elements file.

Anon: Answer

Ensure that the class inherits from the **UserControl** class and overrides the Render method.

Add a reference to the control to an empty elements file.

Create a new SharePoint 2013 Empty Project.

Add a new user control named SuiteLinksDelegate.

## QUESTION 5

### Question 5

You need to implement the custom claims provider for the SharePoint farm.

Which code segments should you implement?

(Each correct answer presents part of the solution. Choose all that apply.)

- A. 

```
public abstract bool SupportsEntityInformation;
protected abstract void FillClaimsForEntity(Uri context, SPClaim entity,
List<SPClaim> claims);
```
- B. 

```
protected abstract void FillSchema(SPPProviderSchema schema);
protected abstract void FillClaimTypes(List<String> claimTypes);
protected abstract void FillClaimValueTypes(List<String> claimValueTypes);
protected abstract void FillEntityTypes(List<String> entityTypes);
```
- C. 

```
public abstract bool SupportsHierarchy;
protected abstract void FillHierarchy(Uri context, String[] entityTypes,
String hierarchyNodeID,
int numberOfLevels, bool includeEntityData, SPPProviderHierarchyTree hierarchy);
```
- D. 

```
public abstract bool SupportsResolve;
protected abstract void FillResolve(Uri context, String[] entityTypes,
String resolveInput,
List<PickerEntity> resolved);
protected abstract void FillResolve(Uri context, String[] entityTypes,
SPClaim resolveInput,
List<PickerEntity> resolved);
```
- E. 

```
public abstract String Name;
```
- F. 

```
public abstract bool SupportsSearch;
protected abstract void FillSearch(Uri context, String[] entityTypes,
String searchPattern,
String hierarchyNodeID, int maxCount, SPPProviderHierarchyTree searchTree);
```

**Correct Answer:** BDEF

**Section:** [none]

**Explanation**

**Explanation/Reference:**

[http://technet.microsoft.com/en-us/library/microsoft.sharepoint.administration.claims.spclaimprovider\\_members.aspx](http://technet.microsoft.com/en-us/library/microsoft.sharepoint.administration.claims.spclaimprovider_members.aspx)

<http://sportstoday.us/technology/sharepoint-2013---claims-based-authentication,-federated-identities,-and-oauth-%28part-5%29---sharepoint-trusted-ips---creating-a-custom-claims-provider.aspx>

Depending on the authentication type you use, SharePoint will access one of three default claims providers:

- SPActiveDirectoryClaimProvider. Used by Windows Authentication

- SPFormsClaimProvider. Used by FBA
- SPTrustedClaimProvider. Used by SAML-based (IP) authentication

**SupportsEntityInformation** When implemented in a derived class, determines whether the claims provider supports information about augmenting claims to entities.

**FillClaimsForEntity** When implemented in a derived class, augments custom claims into a claims token. Implement if you want to add a claim for authorization.

**FillSchema** When implemented in a derived class, fills the schema of the entity. The schema is used by People Picker control to display the entity data.

**FillClaimTypes** When implemented in a derived class, specifies the set of possible claims types that the claims provider supports.

**FillClaimValueTypes** When implemented in a derived class, specifies the set of possible claim value type for claim type that the claims provider supports.

**FillEntityType** When implemented in a derived class, specifies the set of possible entity types that the claims provider is supporting for display in the People Picker control.

To implement name resolution, you need to override this abstract methods

\* From scenario: Franchise Managers must be able to add users to a site in a People Picker control based on claims.

**SupportsHierarchy** When implemented in a derived class, determines whether the claims provider supports hierarchical display.

**FillHierarchy** When implemented in a derived class, provides the People Picker control with the ability to load portions of the tree from the claims provider and specifies the hierarchy for displaying the picker entities.

\* From scenario: the claims must be displayed by using the flattened structure.

**SupportsResolve** When implemented in a derived class, determines whether the claims provider supports resolve operations.

**FillResolve** When implemented in a derived class, resolves claims by using the type-in control of the claims picker.

\* From scenario: Franchise Managers must be able to add users to a site in a People Picker control based on claims. Franchise Managers must be able to search for claims by using the type-in control of the claims picker.

**Name** When implemented in a derived class, gets the unique name for the claims provider.

You must implement the Name property for all custom claims providers.

**SupportsSearch** When implemented in a derived class, determines whether the claims provider supports search operations.

**FillSearch** When implemented in a derived class, fills search results in People Picker control window.

\* From scenario: Franchise Managers must be able to search for claims by using the type-in control of the claims picker.

---

*Mr DUY ANH from Vietnam - Dec 02, 2013:*

Answer is A + C

Because in Case Study, we had: MyClaimsProvider.cs

*Anonymous: Answer ADEF*

*Sam, Niki: Answer BDF*

\* From scenario:  
MyClaimsProvider.cs

```
CP01 [SharePointPermissionAttribute(SecurityAction.LinkDemand, ObjectModel = true)]
CP02 [SharePointPermissionAttribute(SecurityAction.InheritanceDemand, ObjectModel =
true)]
CP03

CP04     public class MyClaimsProvider : Microsoft.SharePoint.Administration.Claims.SPCLa
imProvider
CP05     {
CP06         public abstract String Name;
CP07
CP08         protected abstract void FillSchema(...);
CP09         protected abstract void FillClaimTypes(...);
CP10         protected abstract void FillClaimValueTypes(...);
CP11         protected abstract void FillEntityTypeTypes(...);
CP12
CP13         public abstract bool SupportsResolve;
CP14         protected abstract void FillResolve(...);
CP15         protected abstract void FillResolve(...);
CP16
CP17         public abstract bool SupportsSearch;
CP18         protected abstract void FillSearch(...);
CP19
CP20     }
```

## QUESTION 6

### Question 6

You need to set the appropriate permissions for the franchise employees' customer list and customer subsite access.

What should you do?

A. Add franchise employees to the Members group in the CorporateSiteCollection site collection.

- Break inheritance at the franchisee subsite level.  
Create a custom role definition at the franchisee subsite level.  
Add franchise employees to the custom role.
- B. Create a custom role definition in the CorporateSiteCollection site collection with Limited Access to the Customers list.  
Add franchise employees to the custom role at the CorporateSiteCollection site collection.  
Break inheritance at the subsite level.  
Add franchise owners to the Owners group at the subsite level.
- C. Create a custom role definition in the CorporateSiteCollection site collection with Limited Access to the Customer list.  
Add franchise employees to the custom role.  
Allow full inheritance of the role definition and permissions at the site level.
- D. Add franchise employees to the Visitors group in the CorporateSiteCollection site collection.  
Break inheritance at the franchisee subsite level.  
Create a custom role definition at the subsite level with Full Control permissions.  
Add franchise employees to the custom role.

**Correct Answer:** D

**Section:** [none]

**Explanation**

**Explanation/Reference:**

*Anonymous/Sam:* Answer B

*Niki:* Answer C

## QUESTION 7

### Question 7

You need to create rules in the CourierMobile app based on the ItemType that arrives.

For which ItemTypes should you test?

(Each correct answer presents part of the solution. Choose all that apply.)

- A. IPM.Schedule.Meeting.Tent
- B. IPM.Note
- C. IPM.Schedule.Meeting.Request
- D. IPM.Appointment
- E. IPM.Schedule.Meeting.Cancelled
- F. IPM.Schedule.Meeting.Pos
- G. IPM.Schedule.Meeting.Neg

**Correct Answer:** DE

**Section:** [none]

**Explanation**

**Explanation/Reference:**

<http://msdn.microsoft.com/en-us/library/office/ff861573.aspx>

*Anonymous:* Answer BG

From scenario:

The CourierMobile app receives Microsoft Outlook appointments (D) and Outlook appointment cancellations (E) from the CloudManager app. The appointments include the address of the location for pick-up or drop-off.

**QUESTION 8****Question 8**

You need to meet the requirements for data storage for the CourierMobile app and the CloudManager app.

Which technologies should you use?

(Each correct answer presents part of the solution. Choose all that apply.)

- A. Windows Azure SQL Database
- B. SharePoint content database
- C. Secure Store
- D. SQL Server Express LocalDB
- E. SharePoint list

**Correct Answer:** AD

**Section:** [none]

**Explanation**

**Explanation/Reference:**

<http://technet.microsoft.com/en-us/library/cc262787.aspx#ListLibrary>

A: SQL Azure in the cloud.

D: LocalDB is a lightweight version of Express that has the same programmability features, but it runs in user mode and has a fast, zero-configuration installation and a short list of prerequisites.

not E: List and library limits: Items - 30,000,000 per list (supported)

From scenario:

**CourierMobile App**

The CourierMobile app must be able to capture more than 30 million data points of location data daily as they occur and upload the location data to the cloud when connected to the Internet.

**CloudManager App**

- The CloudManager app must elastically scale to capture courier location data as the number of bicycle couriers increases or decreases.

- The CloudManager app must process bicycle courier location data from a data store capable of storing more than 30 million items.

-----  
*Sam/Anonymous: Answer AD*

D: LocalDB is a lightweight version of Express that has the same programmability features, but it runs in user mode and has a fast, zero-configuration installation and a short list of prerequisites.

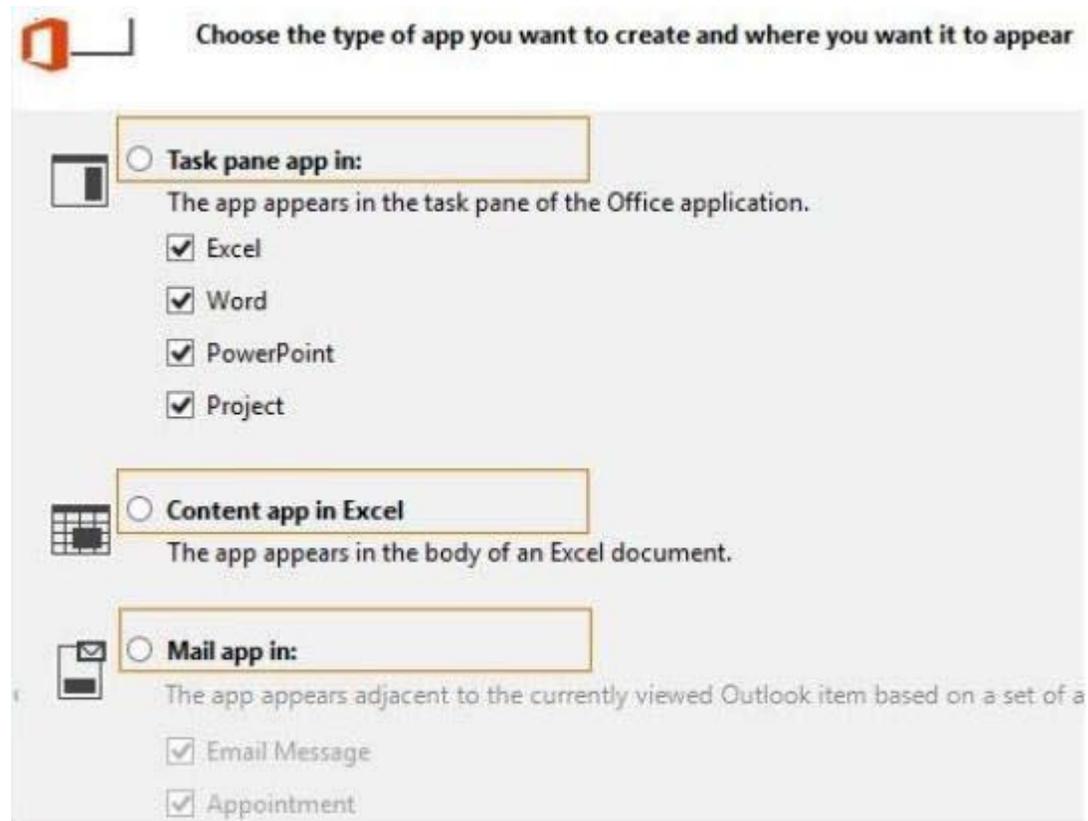
## QUESTION 9

### Question 9

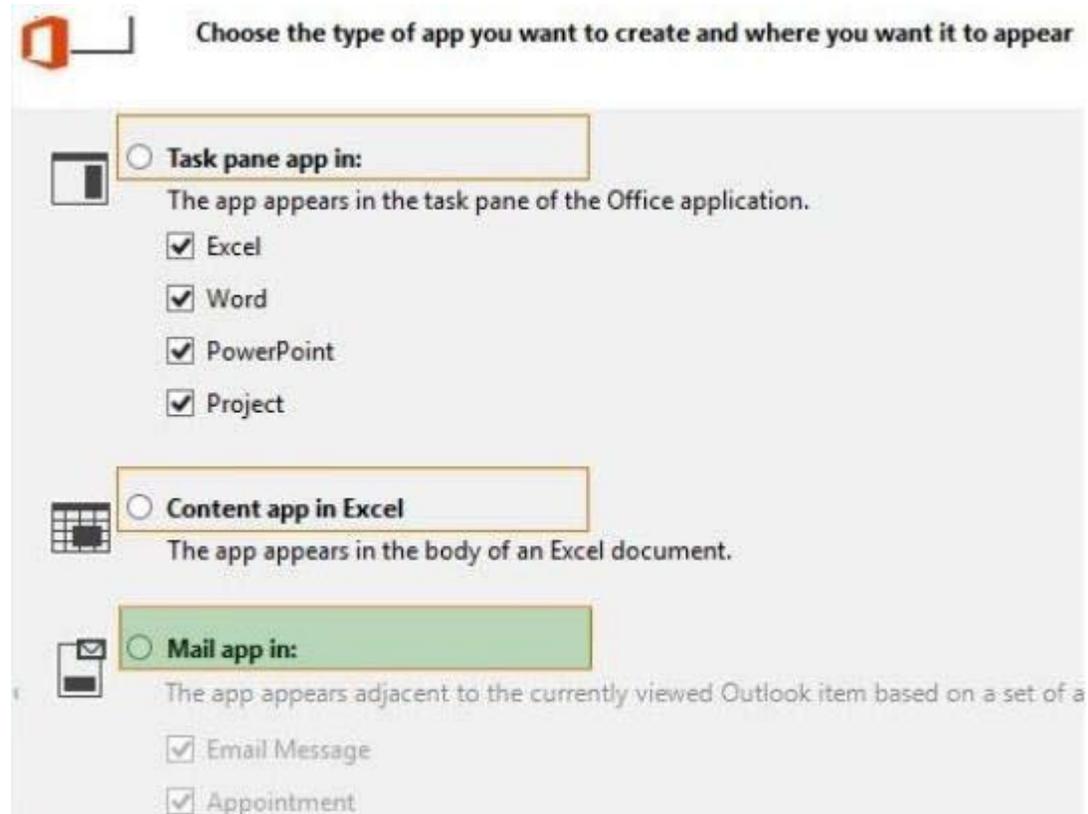
You need to select the app experience for the CourierMobile app. In the App for Office 2013 dialog window, which configuration option should you select?

(To answer, select the appropriate configuration option in the answer area.)

**Hot Area:**



Correct Answer:



Section: [none]

Explanation

Explanation/Reference:

#### QUESTION 10

##### Question 10

You need to create a custom sign-in page to allow the users of the FranchiseMonitor app to authenticate against SharePoint and Margie's Travel API.

What should you do?

A. Create an app for SharePoint. Set the trust level to Sandbox solution.

- Create an application page that writes a cookie named FedAuth.  
Deploy the app and configure the Sign In Page URL in Central Administration Authentication Provider for the zone.
- B. Create an app for SharePoint. Set the trust level to Farm solution.  
Create an application page that writes a cookie named FedAuth.  
Deploy the app and configure the Sign In Page URL in Central Administration Authentication Provider for the zone.
- C. Create an app for SharePoint. Set the trust level to Farm solution.  
Create an application page that writes a cookie named ASPXAUTH.  
Deploy the app and configure the Sign In Page URL in Central Administration Authentication Provider for the zone.
- D. Create an app for SharePoint. Set the trust level to Sandbox solution.  
Create an application page that writes a cookie named ASPXAUTH.  
Deploy the app and configure the Sign In Page URL in Central Administration Authentication Provider for the zone.

**Correct Answer:** B

**Section:** [none]

**Explanation**

**Explanation/Reference:**

The ASPXAUTH cookie is used to determine if a user is authenticated.

FedAuth Cookie is what is used with **Claims Authentication**. SharePoint STS will issue the FedAuth Cookie which contains the references to the claims token. Claim tokens are actually stored separately.

From scenario:

The FranchiseMonitor app must be deployed **to all site collections** by the SharePoint administrator.

## **QUESTION 11**

### **Question 11**

You need to design the FranchiseMonitor app to meet the requirements.

What should you do?

(To answer, select the appropriate option from each drop-down list in the answer area.)

**Hot Area:**

Create the FranchiseMonitorApp app as an  .

Design the FranchiseMonitorApp app UI with a/an  app shape.

**Correct Answer:**

Create the FranchiseMonitorApp app as an  .

Design the FranchiseMonitorApp app UI with a/an  app shape.

**Section: [none]**

**Explanation**

**Explanation/Reference:**

Apps can be App Part, Custom Action or Pages (immersive).

- The immersive full-page app is the default entry point for SharePoint apps.
- App Part is a type of Web Part that is represented by the ClientWebPart class. App Part is not replacement for WebPart. An App Part is essentially a wrapper for an IFrame that would host a page of the App. In addition to acting as a Wrapper, like a WebPart, an App part can have custom properties that users can set in a tool part.

<http://www.codeproject.com/Articles/690015/SharePoint-2013-Online-App-Development-Part-1>

-----  
 Sam/Anonymous: CourierManagerApp in drag and drop picture.  
 See Question 9 - CourierManagerApp is App for Office.

## Testlet 1

### SharePoint

A client asks you to create a basic task tracking app for SharePoint. The app will be hosted remotely. The users will be able to set up task lists, mark tasks as completed, and manage their task lists.

#### Business Requirements

The client specifies the following business requirements:

- Users can create task lists.
- Users can retrieve task lists.
- Project leads can remove task lists.
- Users can modify task lists.
- Only users with a paid license can use the app.
- Tasks can be tagged with the programming language being used. Task list items may be tagged only with the following terms: C++, C#, and JavaScript.
- Navigational links across the top should be driven by the term store and use URLs that will improve search engine ranking.
- Set a system message that all users can access without the need to query a data source.
- Remote users will authenticate to the app by using a username and password.
- During development, the app will be tested by deploying to a development SharePoint site at <http://contoso.sharepoint.com/tasks>.
- When completed, the app will be published to the Microsoft Store as a paid app.

#### Existing Site Configuration

The table below shows the current site configuration for the client's SharePoint site.

Site/Site Collection	Description
<a href="http://contoso-public.sharepoint.com">http://contoso-public.sharepoint.com</a>	Public-facing site
<a href="https://contoso.sharepoint.com/tasks">https://contoso.sharepoint.com/tasks</a>	Development site for tasks app
<a href="https://contoso.sharepoint.com/search">https://contoso.sharepoint.com/search</a>	Search site
<a href="https://contoso-my.sharepoint.com">https://contoso-my.sharepoint.com</a>	Personal My Site

#### Task List Design

The app should create a SharePoint list named Tasks with the following attributes:

Field Name	Data Type	Contents
Department	Text	
Description	Text	
Hours	Number	
Completed	Radio Button	"Yes", "No"

### User Groups

SharePoint groups will be used to manage access to features of the app.

Group	Description
Admin	Admin can perform all tasks including creating projects, assigning users to projects, and maintaining all task lists.
Project Leads	Project leaders are the only members who have the ability to delete tasks.
Users	Users have the ability to add and manage tasks in their own projects, but cannot delete tasks.

### Task Display

The app should retrieve the Tasks list and display the contents on a webpage 20 tasks at a time.

### Technical Requirements

You have the following requirements:

- Query the Microsoft apps licensing service to validate the license.
- Package and configure the app.
- Configure navigation to use taxonomy-based navigation automatically generated by SharePoint.
- Utilize CSOM to retrieve data from the SharePoint site.
- Implement the system message by using a property bag that uses the key named SystemMessage.
- Implement and configure the credential store.
- The app will be internally tested for at least one month to track and fix any run- time errors.

### Pending Issues

When you deploy the app from Visual Studio 2012, you receive the error:

"Error occurred in deployment step 'Install app for SharePoint': Sideloading of apps is not enabled on this

site."

## Application Structure

- **Application Structure:**

Relevant portions of the app files are shown below. (Line numbers in the code segments are included for reference only and include a two-character prefix that denotes the specific file to which they belong.)

- **LicenseValidation.cs:**

```
LV01  protected bool IsLicenseValid(Guid productId, ClientContext context)
LV02  {
LV03      string token = "";
LV04      ClientResult<AppLicenseCollection> licenseCollection =
        Utility.GetAppLicenseInformation(context, productId);
LV05      context.Load(context.Web);
LV06      context.ExecuteQuery();
LV07      foreach (AppLicense license in licenseCollection.Value)
LV08      {
LV09          token = license.RawXMLLicenseToken;
LV10          break;
LV11      }
LV12      VerificationServiceClient service = null;
LV13      VerifyEntitlementTokenResponse result = null;
LV14      VerifyEntitlementTokenRequest request =
        new VerifyEntitlementTokenRequest();
LV15      request.EntitlementToken = token;
LV16      service = new VerificationServiceClient();
LV17      result = service.VerifyEntitlementToken(request);
LV18      if (result != null && result.AssetId != null)
LV19
LV20      }
LV21      return false;
LV22 }
```

- SystemMessage.cs:

```
SM01 public void SetSystemMessage(string message)
SM02 {
SM03     string url = "https://sharepoint.contoso.com/tasks";
SM04     string property = "SystemMessage";
SM05     var context = new ClientContext(url);
SM06     NetworkCredential credentials =
SM07     new NetworkCredential("", "", "");
SM08     context.Credentials = credentials;
SM09
SM09     Site site = context.Site;
SM10     context.Load(site);
SM11     Web web = site.RootWeb;
SM12     context.Load(web, w => w.AllProperties);
SM13     context.ExecuteQuery();
SM14     PropertyValues propertyValues = web.AllProperties;
SM15     context.Load(propertyValues);
SM16     web.AllProperties[property] = message;
SM17     web.Update();
SM18 }
```

- ImplementTaskList.cs:

```
IL01 protected void ImplementTaskList()
IL02 {
IL03     ClientContext context = new ClientContext("http://sharpoing.contoso.com/tasks");
IL04     List list = context.Web.Lists.GetByTitle("Announcements");
IL05     Field department =
IL06         list.Fields.AddFieldAsXml("<Field DisplayName='Department' Type='Text' />",
IL07         true,
IL08         AddFieldOptions.DefaultValue);
IL09     FieldText departmentField = context.CastTo<FieldText>(department);
IL10     departmentField.Update();
IL11     Field description =
IL12         list.Fields.AddFieldAsXml("<Field DisplayName='Department' Type='Text' />",
IL13         true,
IL14         AddFieldOptions.DefaultValue);
IL15     FieldText descriptionField = context.CastTo<FieldText>(description);
IL16     descriptionField.Update();
IL17     Field hours =
IL18         list.Fields.AddFieldAsXml("<Field DisplayName='Hours' Type='Number' />",
IL19         true, AddFieldOptions.DefaultValue);
IL20     FieldNumber hoursField = context.CastTo<FieldNumber>(hours);
IL21     hoursField.Update();
IL22
IL23     context.ExecuteQuery();
IL24 }
```

- RetrieveTaskList.cs:

```

RT01 protected void RetrieveTaskList()
RT02 {
RT03     ClientContext context = new
RT04         ClientContext("https://sharepoint.contoso.com/tasks");
RT05     List taskList = context.Web.Lists.GetByTitle("Tasks");
RT06     CamlQuery query = CamlQuery.CreateAllItemsQuery(20);
RT07     Microsoft.SharePoint.Client.ListItemCollection
RT08         tasks = taskList.GetItems(query);
RT09     context.Load(tasks);
RT10     context.ExecuteQuery();
RT11     foreach (Microsoft.SharePoint.Client.ListItem task in tasks)
RT12     {
RT13         ...
RT14     }
RT15 }

```

- CanDeleteTask.cs:

```

CD01 protected bool CanDeleteTask(string targetEmail)
CD02 {
CD03     ClientContext context = new ClientContext("https://sharepoint.contoso.com/
CD04     tasks");
CD05     context.ExecuteQuery();
CD06
CD07     foreach (User user in members.Users)
CD08     {
CD09         if (user.Email == targetEmail)
CD10         {
CD11             return true;
CD12         }
CD13     }
CD14     return false;
CD15 }

```

• TermSetNavigation.cs:

```
TN01 public void CreateNavigationTermSet()
TN02 {
TN03     ClientContext clientContext = new ClientContext("https://sharepoint.contoso.com/
tasks");
TN04     TaxonomySession session = TaxonomySession.GetTaxonomySession(clientContext);
TN05     taxonomySession.UpdateCache();
TN06     clientContext.Load(session, ts => ts.TermStores);
TN07     clientContext.ExecuteQuery();
TN08     TermStore store = taxonomySession.TermStores[0];
TN09     clientContext.Load(store,
TN10         s => s.Name,
TN11         s => s.WorkingLanguage);
TN12     TermGroup siteCollectionGroup = termStore.GetSiteCollectionGroup
(clientContext.Site, createIfMissing: true);
TN13     TermSet set = siteCollectionGroup.CreateTermSet("Task Terms");
TN14     store.CommitAll();
TN15     clientContext.ExecuteQuery();
TN16
TN17     termSet.IsNavigationTermSet = true;
TN18     termSet.TargetUrlForChildTerms.Value = "~site/Pages/Tasks/Tasks.aspx";
TN19     termStore.CommitAll();
TN20     clientContext.ExecuteQuery();
TN21     NavigationTerm term = termSet.CreateTerm("Programming
Languages", NavigationLinkType.SimpleLink,
TN22         Guid.NewGuid());
TN23     term.SimpleLinkUrl = "https://sharepoint.contoso.com/tasks";
TN24
TN25     term.GetTaxonomyTerm().TermStore.CommitAll();
TN26     clientContext.ExecuteQuery();
TN27 }
```

## QUESTION 1

### Question 1

You need to configure the credential store for the app. Which properties should you configure?  
(Each correct answer presents part of the solution. Choose all that apply.)

- A. Pin
- B. Windows Password
- C. Windows User Name
- D. Password
- E. User Name

**Correct Answer:** DE

**Section:** [none]

**Explanation**

**Explanation/Reference:**

From scenario:

- A client asks you to create a basic task tracking app for SharePoint. The app will be hosted remotely
- Remote users will authenticate to the app by using a username and password.

*Anon:* Answer A&C

## QUESTION 2

### Question 2

You need to deploy the package. Which file should you select?

- A. the file ending in .publish
- B. the file ending in .wsp
- C. the file ending in .dll
- D. the file ending in .app

**Correct Answer:** D

**Section:** [none]

**Explanation**

**Explanation/Reference:**

From scenario:

\* When completed, the app will be published to the Microsoft Store as a paid app.

## QUESTION 3

### Question 3

You need add to code at line IL22 to implement the task list design.

How should you complete the relevant code?

(To answer, drag the appropriate code segments to the correct location or locations in the answer area. Each code segment may be used once, more than once, or not at all.)

**Select and Place:**

The screenshot shows a drag-and-drop interface. On the left, under the heading "Select and Place:", there is a vertical list of code segments in yellow boxes:

- Text
- Choice
- DropDown
- FieldText
- FieldChoice
- RadioButtons
- "Yes", "No"
- "True", "False"

On the right, under the heading "Answer Area", there is a code editor with the following C# code:

```
Field completed = list.Fields.AddFieldAsXml(  
    "<Field DisplayName='Completed'  
    Type= [ ] />",  
    true,  
    AddFieldOptions.DefaultValue);  
FieldChoice completedField =  
    context.CastTo<FieldChoice>(completed);  
completedField.EditFormat =  
    ChoiceFormatType. [ ] ;  
string[] choices = { [ ] };  
completedField.Choices = choices;
```

**Correct Answer:**

The screenshot shows a development interface with a vertical list of field types on the left and an 'Answer Area' on the right. The field types listed are: Text, Choice, DropDown, FieldText, FieldChoice, RadioButtons, "Yes", "No", and "True", "False". The 'Answer Area' contains the following C# code:

```
Field completed = list.Fields.AddFieldAsXml(
    "<Field DisplayName='Completed'
    Type= Choice />",
    true,
    AddFieldOptions.DefaultValue);
FieldChoice completedField =
    context.CastTo<FieldChoice>(completed);
completedField.EditFormat =
    ChoiceFormatType. RadioButtons ;
string[] choices = { "Yes", "No" };
completedField.Choices = choices;
```

Section: [none]  
Explanation

Explanation/Reference:

#### QUESTION 4

##### Question 4

You receive an error when you deploy the app. You need to resolve the error.

What should you do?

- A. Deploy the app to <http://contoso-public.sharepoint.com>.
- B. Enable side-loading of apps in the Visual Studio project properties.
- C. Deploy the app to <https://contoso-my.sharepoint.com>.
- D. Create a deployment package and upload the app to the app catalog in SharePoint.

- E. Deploy the app to <https://contoso.sharepoint.com/tasks>.
- F. Enable side-loading of apps in the app manifest.

**Correct Answer:** B

**Section:** [none]

**Explanation**

**Explanation/Reference:**

*There was two versions with different options - V1:ABCE and V2:BCDF*

Wright answer should be

Enable-SPFeature -Identity "EnableAppSideLoading" -url <siteurl>

This happens, because in order to deploy apps to a site-collection one of the following must be true.

- The site-collection must be the root site collection if it's a host named site-collection (all SharePoint online site-collections are host named)
- The site-collection features, **Developer** (e374875e-06b6-11e0-b0fa-57f5dfd72085) or **EnableAppSideload** (AE3A1339-61F5-4f8f-81A7-ABD2DA956A7D) must be enabled

<http://wp.sjpk.dk/sideloadng-of-apps-is-not-enabled-on-this-site/>

<http://blogs.msdn.com/b/how24/archive/2013/06/14/prepare-your-sharepoint-2013-farm-for-app-development-and-debugging.aspx>

*Sam/Anonymous/Niki: Answer A(V1), D(V2)*

## QUESTION 5

### Question 5

You need to implement term set navigation.

Which code segment should you insert at line TN16?

- A. 

```
NavigationTermSet navigationTerms =  
    NavigationTermSet.GetAsResolvedByWeb(clientContext,  
    termSet, clientContext.Web,  
    "GlobalNavigationTaxonomyProvider");
```
- B. 

```
NavigationTermSet navigationTerms =  
    NavigationTermSet.GetAsResolvedByWeb(clientContext,  
    termSet, clientContext.Web,  
    "GlobalNavigationSwitchableProvider");
```

- C. `NavigationTermSet navigationTerms =  
NavigationTermSet.GetAsResolvedByWeb(clientContext,  
termSet, clientContext.Web,  
"CurrentNavigationTaxonomyProvider");`
- D. `NavigationTermSet navigationTerms =  
NavigationTermSet.GetAsResolvedByWeb(clientContext,  
termSet, clientContext.Web,  
"CurrentNavigationSwitchableProvider");`

**Correct Answer:** A

**Section:** [none]

**Explanation**

**Explanation/Reference:**

From scenario:

\* Navigational links **across the top** should be driven by the term store and use URLs that will improve search engine ranking.

The **TaxonomySiteMapProvider** instance used for the global navigation scheme.

The **TaxonomySiteMapProvider** instance used for the current navigation scheme. whose menu typically appears on the left side of the master page.

[http://msdn.microsoft.com/en-US/library/microsoft.sharepoint.publishing.navigation.standardnavigationprovidernames\\_members.aspx](http://msdn.microsoft.com/en-US/library/microsoft.sharepoint.publishing.navigation.standardnavigationprovidernames_members.aspx)

## QUESTION 6

### Question 6

You need to validate that specific users can delete tasks.

Which code segment should you insert at line CD04?

- A. `GroupCollection groups = context.Web.SiteGroups;  
Group members = groups.GetByName("Users");  
context.Load(members.Groups);`
- B. `GroupCollection groups = context.Web.SiteGroups;  
Group members = groups.GetByName("Users");  
context.Load(members.Users);`

- C. `List groups = context.Web.SiteUserInfoList;  
Group members = groups.GetByName("Project Leads");  
context.Load(members.Users);`
- D. `GroupCollection groups = context.Web.SiteGroups;  
Group members = groups.GetByName("Project Leads");  
context.Load(members.Users);`

**Correct Answer:** D

**Section:** [none]

**Explanation**

**Explanation/Reference:**

From scenario:

\* Project leads can remove task lists.

## QUESTION 7

### Question 7

You need to implement term set navigation.

Which code segment should you insert at line TN24?

- A. `NavigationTerm childTerm  
= term.CreateTerm("C++", NavigationLinkType.Root, Guid.NewGuid());`
- B. `NavigationTerm childTerm  
= term.CreateTerm("C++", NavigationLinkType.Default, Guid.NewGuid());`
- C. `NavigationTerm childTerm  
= term.CreateTerm("C++", NavigationLinkType.SimpleLink, Guid.NewGuid());`
- D. `NavigationTerm childTerm  
= term.CreateTerm("C++", NavigationLinkType.FriendlyUrl, Guid.NewGuid());`

**Correct Answer:** D

**Section:** [none]

**Explanation**

**Explanation/Reference:**

From scenario:

\* Navigational links across the top should be driven by the term store and use URLs that will improve search engine ranking.

The NavigationLinkType enumeration has the following members.

- FriendlyUrl Specifies a navigation node that defines a new URL for an existing SharePoint page by rewriting the URL.
- Root Specifies the root node in the navigation tree that corresponds to a NavigationTermSet object.
- SimpleLink Specifies a navigation node with a standard hyperlink to an already existing URL. The URL can be an empty string, in which case the navigation node acts as a simple heading in the menu.

<http://msdn.microsoft.com/library/microsoft.sharepoint.publishing.navigation.navigationlinktype.aspx>

## QUESTION 8

### Question 8

You need to complete the code at line LV19 to implement the validation of the app license.

Which code segment should you use?

- A. 

```
if (result.EntitlementType.ToLower() == "trial")
{
    return true;
}
```
- B. 

```
if (result.EntitlementType.ToLower() == "valid")
{
    return true;
}
```
- C. 

```
if (result.EntitlementType.ToLower() == "paid")
{
    return true;
}
```
- D. 

```
if (result.EntitlementType.ToLower() == "free")
{
    return true;
}
```

**Correct Answer:** C

**Section:** [none]

**Explanation**

**Explanation/Reference:**

From scenario:

\* Only users with a paid license can use the app.

Valid values include Free, Paid, and Trial.

<http://msdn.microsoft.com/en-us/library/office/verificationsvc.verifyentitlementtokenresponse.entitlementtype.aspx>

## Testlet 1

### Coho Winery

#### Background

Coho Winery implements a SharePoint farm. They have an intranet site for company employees and an extranet site for their customers.

Coho Winery sells products to wholesale and retail customers.

Customers must be able to order specific brands and pay directly.

#### Business Requirements

- **Site Collection:**

The company must organize its main enterprise site to have multiple site collections for different wine brands from various regions.

Site documents must have a consistent look and feel.

- **New Features:**

The first version (1.0.0.0) of the feature must support the addition of newer functionality when the feature is upgraded to version 1.5.0.0.

#### Technical Requirements

- **General:**

- A Document content type named Finance must be created at the site level. It must contain two site columns named Customer Name and Transaction Date.
- The Order Details and Payment Confirmation content types must be derived from the Finance content type.
- Workflows associated with document content types must be initiated when documents are generated.
- When Payment Confirmation documents are generated, a workflow must send a notification to the customer by email.

- **User Authorization:**

- A custom role named Wholesale must be created. Wholesale customers must be assigned to this role in order to view the promotions page.
- A custom permission level must be created. This permission level must add the ViewPages permission to the existing base permissions. This permission level must be added to Wholesale user role.
- Anonymous users must be able to browse the site with limited access to resources.
- The web application has been created with anonymous access enabled.
- Users are prompted for credentials when they browse to the site.

- **Application Lifecycle Management:**

- Versioning of the solution artifacts must adhere to industry best practices.
- In a future upgrade process, a new site column named Division must be added to the Finance content type programmatically.
- Only one version of an assembly must be available at runtime.
- Code based hot fixes must be deployed directly to the Global Assembly Cache on all SharePoint servers.
- During maintenance periods, content must be available but must not be modified.

- **Backup and Recovery:**

- In the event of hardware failure, the SharePoint environment must be restored to the most recent date.
- The backup process must not degrade system performance.

- **Performance Optimization and Memory Usage:**

SPSite objects must be removed from memory immediately after the objects go out of scope.

- **Automation:**

Windows PowerShell must be used to automate all operations wherever possible.

## **Application Structure**

- **Application Structure:**

Relevant portions of the application files are shown below.

(Line numbers in the code segments are included for reference only and include a two-character prefix that denotes the specific file to which they belong.)

- **ContentType.cs:**

```
CT01 public override void
    FeatureActivated(SPFeatureReceiverProperties spFtRcvProperties)
CT02 {
CT03     SPWeb web =
        ((SPSite)spFtRcvProperties.Feature.Parent).RootWeb;
CT04     string financeColumn = "Finance Columns";
CT05     string customerFieldName =
        web.Fields.Add("Customer Name", SPFieldType.Text, true);
CT06
CT07     string transDateFieldName = web.Fields.Add("Transaction
Date", SPFieldType.DateTime, true);
CT08     ...
CT09     string contentTypeGroup = "Finance Content Types";
CT10     SPContentType docContentType =
        web.AvailableContentTypes[SPBuiltInContentTypeId.Document];
CT11
CT12     docContentType1 = web.ContentTypes.Add(docContentType1);
CT13     docContentType1.Group = contentTypeGroup;
CT14     SPFieldLink transDateFieldRef =
        new SPFieldLink(transDateField);
CT15     transDateFieldRef.Required = true;
CT16     docContentType1.FieldLinks.Add(transDateFieldRef);
CT17     docContentType1.Update();
CT18     docContentType2 = web.ContentTypes.Add(docContentType2);
CT19     docContentType2.Group = contentTypeGroup;
CT20     SPFieldLink titleODFieldRef =
        docContentType2.FieldLinks[SPBuiltInFieldId.Title];
CT21     ...
CT22     titleODFieldRef.Required = true;
CT23     ...
CT24     docContentType2.Update();
CT25     docContentType3 = web.ContentTypes.Add(docContentType3);
CT26     docContentType3.Group = contentTypeGroup;
CT27     SPFieldLink titlePmtFieldRef =
        docContentType3.FieldLinks[SPBuiltInFieldId.Title];
CT28     ...
CT29     titlePmtFieldRef.Required = true;
CT30     ...
CT31     docContentType3.Update();
```

- **UserAuthorization.cs:**

```
UA01 private SPBasePermissions _permissions =
    SPBasePermissions.EmptyMask;
UA02 public override void
    FeatureActivated(SPFeatureReceiverProperties properties)
UA03 {
UA04     try
UA05     {
UA06         SPSite site =
    new SPSite("http://localhost:80/sites/brands/Wholesale");
UA07
UA08         using (SPWeb web = site.RootWeb)
UA09         {
UA10             _permissions = this.GetExistingPermissions();
UA11
UA12             foreach (SPWeb spWebItem in web.Webs)
UA13             {
UA14                 ...
UA15             }
UA16         }
UA17     }
UA19     {
UA20
UA21     }
UA22
UA23 }
UA24 private SPBasePermissions GetExistingPermissions()
UA25 {
UA26     SPBasePermissions permissions =
    SPBasePermissions.EmptyMask;
UA27     ...
UA28     return permissions;
UA29 }
```

- ContentType.Finance.Template.xml:

```
CX01 <Feature Id="08380D6A-858C-4618-9525-50E9D6DEAD53"  
CX02 Title="ContentType.Finance"  
CX03 Description="Content type for Finance"  
CX04 ReceiverClass="MyFeatureReceiver.MyReceiver"  
CX05 xmlns="http://schemas.microsoft.com/sharepoint/">  
CX06 ...  
CX07 <ElementManifests>  
CX08 <ElementManifest Location="ElementsV1.xml" />  
CX09 <ElementManifest Location="ElementsV2.xml" />  
CX10 </ElementManifests>  
CX11  
CX12 <UpgradeActions>  
CX13  
CX14 <ApplyElementManifests>  
CX15 <ElementManifest Location="ElementsV2.xml" />  
CX16 </ApplyElementManifests>  
CX17 <AddContentTypeField  
ContentTypeId="0x010123F15ADB2FA333AA49848E7E01BC79C9753222"  
FieldId="{4FB9816F-799D-41F3-B801-B8F5FEB3A5CD}"/>  
CX18 <CustomUpgradeAction Name=" " ">  
CX21 <Parameters>  
CX22 <Parameter Name="Division">Finance</Parameter>  
CX23 </Parameters>  
CX24 </CustomUpgradeAction>  
CX25  
CX26 </UpgradeActions>  
CX27  
CX28 </Feature>
```

- ExportWholesaleSites.ps1:

```
EW01 $site = Get-SPSite "http://localhost:80/sites/brands/Wholesale";
EW02 foreach ($web in $site.AllWebs)
EW03 {
EW04
EW05     $web | Export-SPWeb -Path ($web.Title + ".cmp") -Force;
EW06     $date = Get-Date;
EW07     if ($web.AllProperties["LastWebExport"] -eq $null)
EW08     {
EW09         $web.AddProperty("LastWebExport", $date);
EW10         $web.Update();
EW11     }
EW12     else
EW13     {
EW14         $web.SetProperty("LastWebExport", $date);
EW15         $web.Update();
EW16     }
EW17
EW18 }
```

## QUESTION 1

### Question 1

A server in the SharePoint farm experiences high memory usage. Task Scheduler on the server runs a Windows PowerShell script to perform backups of Wholesale sites.

You need to resolve any memory leak issues in the Windows PowerShell script.

- A. Insert the code segment at line EW04:  
`Start-SPAssignment -Global`
- B. Insert the code segment at line EW17:  
`$site.Close()`
- C. Insert the code segment at line EW17:  
`Stop-SPAssignment -SemiGlobal`
- D. Insert the code segment at line EW17:

Stop-SPAssignment -Global

**Correct Answer:** AD

**Section:** [none]

**Explanation**

**Explanation/Reference:**

- *Start-SPAssignment -Global* initiates a new assignment store.
- *Stop-SPAssignment* disposes of objects in the provided assignment collection.

The Stop-SPAssignment cmdlet disposes of objects in the provided assignment collection.

Use the **Global** parameter to dispose of all objects in the global assignment collector and to stop the global store from collecting additional objects.

Provide a **SemiGlobal** assignment collector to dispose of all contained objects.

There are three levels of assignment:

- No assignment - The object is not assigned to a variable and is disposed of after each iteration of the command.
- Simple assignment - All objects are assigned to the global assignment store. This is done by using the Global parameter. When using this level, all objects are assigned to a global store and are disposed of when the Stop-SPAssignment cmdlet is called.
- Advanced assignment - Objects are assigned to named stores for disposal. You can dispose of objects by using the Identity parameter with the Stop-SPAssignment cmdlet.

While easier to use simple assignment, running commands that **iterate** through multiple SPSite or SPWeb objects **while simple assignment is enabled is not recommended**. Ensure that Stop-SPAssignment is run before attempting any iterations of multiple objects.

*From scenario:*

Performance Optimization and Memory Usage

SPSite objects must be removed from memory immediately after the objects go out of scope.

## **QUESTION 2**

### **Question 2**

You need to add code at line UA09 to create the custom role.

How should you complete the relevant code?

(To answer, select the appropriate code segment from each drop-down list in the answer area.)

**Hot Area:**

```
var customRole = new  ();

customRole.Name = "Wholesale";
customRole.Description = "Custom role for Wholesale customers";








```

Correct Answer:

```
var customRole = new  ();

customRole.Name = "Wholesale";
customRole.Description = "Custom role for Wholesale customers";








```

**Section: [none]**

**Explanation**

**Explanation/Reference:**

### **QUESTION 3**

#### **Question 3**

After deploying a solution, a code-based hotfix becomes available. You need to deploy the hotfix.

What should you do? (Each correct answer presents part of the solution. Choose all that apply.)

- A. Use assembly binding redirection in the web application configuration file.
- B. Increment the assembly file version of the assembly.
- C. Increment the product version of the assembly.
- D. Increment the assembly version of the assembly.
- E. Use assembly binding redirection in the assembly policy file.

**Correct Answer:** AD

**Section: [none]**

**Explanation**

**Explanation/Reference:**

Assembly versions are everywhere in SharePoint - web.config files, web part definitions, workflow definitions, event receiver bindings - the list goes on. In each case, the version number is absolutely required so that SharePoint can load the code to run at that time. If you update an assembly's version, you have two choices to ensure your code can still be loaded:

- Find and update every reference to the previous assembly version.
- Use a binding redirect in the relevant .config file (e.g. web.config) to point to the new version of the assembly.

C: Assembly Version: This is the version number used by framework during build and at runtime to locate, link and load the assemblies. When you add reference to any assembly in your project, it is this version number which gets embedded. At runtime, CLR looks for assembly with this version number to load. But remember this version is used along with name, public key token and culture information only if the assemblies are strong-named signed. If assemblies are not strong-named signed, only file names are used for loading.

Incorrect:

not B: Assembly File Version : This is the version number given to file as in file system. It is displayed by Windows Explorer. Its never used by .NET framework or runtime for referencing.

From scenario:

- Solution artifacts must adhere to industry best practices.
- Code based hot fixes must be deployed directly to the Global Assembly Cache on all SharePoint servers.
- Only one version of an assembly must be available at runtime.

Sam/Anonymous: Answer AC

#### QUESTION 4

##### Question 4

You need to add code at line CT11 to create the content types.

How should you complete the relevant code?

(To answer, drag the appropriate code segments to the correct location or locations in the answer area. Each code segment may be used once, more than once, or not at all.)

##### Select and Place:

The interface shows a 'Select and Place' area on the left with seven code segments and an 'Answer Area' on the right with three pre-written code lines and three empty boxes for placement.

**Code Segments (Left):**

- (docContentType, web.ContentTypes, "Finance");
- (docContentType, web.ContentTypes, "Order Details");
- (docContentType, web.ContentTypes, "Payment Confirmation");
- (docContentType1, web.ContentTypes, "Finance");
- (docContentType1, web.ContentTypes, "Order Details");
- (docContentType1, web.ContentTypes, "Payment Confirmation");
- (docContentType2, web.ContentTypes, "Payment Confirmation");

**Answer Area (Right):**

SPContentType docContentType1 = new SPContentType

SPContentType docContentType2 = new SPContentType

SPContentType docContentType3 = new SPContentType

**Correct Answer:**

<pre>(docContentType, web.ContentTypes, "Finance");</pre>	<p>Answer Area</p>
<pre>(docContentType, web.ContentTypes, "Order Details");</pre>	<pre>SPContentType docContentType1 = new SPContentType (docContentType, web.ContentTypes, "Finance");</pre>
<pre>(docContentType, web.ContentTypes, "Payment Confirmation");</pre>	<pre>SPContentType docContentType2 = new SPContentType (docContentType1, web.ContentTypes, "Order Details");</pre>
<pre>(docContentType1, web.ContentTypes, "Finance");</pre>	<pre>SPContentType docContentType3 = new SPContentType</pre>
<pre>(docContentType1, web.ContentTypes, "Order Details");</pre>	<pre>(docContentType1, web.ContentTypes, "Payment Confirmation");</pre>
<pre>(docContentType1, web.ContentTypes, "Payment Confirmation");</pre>	
<pre>(docContentType2, web.ContentTypes, "Payment Confirmation");</pre>	

**Section:** [none]

**Explanation**

**Explanation/Reference:**

<http://msdn.microsoft.com/en-us/library/ms480288.aspx>

From scenario:

\* A Document content type named Finance must be created at the site level. It must contain two site columns named Customer Name and Transaction Date.

\* The Order Details and Payment Confirmation content types must be derived from the Finance content type.

CT20: titleODFieldRef

CT27: titlePmtFieldRef

**QUESTION 5**

**Question 5**

You need to create the required site columns.

How should you complete the relevant code?

(To answer, select the appropriate code segment from each drop-down list in the answer area.)

**Hot Area:**

```
String customerFieldName = web.Fields.Add("Customer Name",  
                                         SPFieldType.Text, true);  
SPFieldText customerField = web.Fields.  
    [ ] (customerFieldName) as SPFieldText;  
    [ ]  
    [ ]  
    [ ]  
customerField.  
    [ ]  
    [ ]  
    [ ]
```

**Correct Answer:**

```
String customerFieldName = web.Fields.Add("Customer Name",
                                         SPFieldType.Text, true);
SPFieldText customerField = web.Fields.
    (customerFieldName) as SPFieldText;
```

- Add
- CreateNewField
- GetFieldByInternalName

```
customerField.Group = financeColumn;
customerField.XPath = financeColumn;
customerField.RelatedField = financeColumn;
```

customerField. 

- Commit();
- Update();
- SetCustomProperty();

Section: [none]

Explanation

Explanation/Reference:

#### QUESTION 6

##### Question 6

Customers report that upon creation of the Payment Confirmation document, they do not receive a confirmation message. You need to ensure that customers receive confirmation messages.

What should you do?

- A. Ensure that the user has the correct permissions to start a workflow.
- B. Ensure that the Payment Confirmation content type is deployed.

- C. Ensure that the user is assigned to the Wholesale role.
- D. Ensure that a workflow is associated with the document content type.

**Correct Answer:** D

**Section:** [none]

**Explanation**

**Explanation/Reference:**

From scenario:

- Workflows associated with document content types must be initiated when documents are generated.
- When Payment Confirmation documents are generated, a workflow must send a notification to the customer by email.

## QUESTION 7

### Question 7

You need to set the appropriate permission levels. A variable named customRole references Wholesale.

Which code segment should you add at line UA09?

- A. `customRole.BasePermissions = _permissions | SPBasePermissions.ViewFormPages;`
- B. `customRole .BasePermissions = _permissions | SPBasePermissions.ViewPages;`
- C. `customRole.BasePermissions = SPBasePermissions.EmptyMask | SPBasePermissions.ViewPages;`
- D. `customRole.BasePermissions = SPBasePermissions.ViewPages;`

**Correct Answer:** B

**Section:** [none]

**Explanation**

**Explanation/Reference:**

**ViewPages** View pages in a Web site.

<http://msdn.microsoft.com/en-us/library/microsoft.sharepoint.spbasepermissions.aspx>

From scenario:

- A custom role named Wholesale must be created. Wholesale customers must be assigned to this role in order to view the promotions page.
- A custom permission level must be created. This permission level must add the **ViewPages** permission to the existing base permissions. This permission level must be added to Wholesale user role.

## Testlet 1

### Litware Inc.

#### Background

You are a SharePoint developer working for Litware Inc., a large bicycle manufacturing company. Litware runs an intranet that is based on SharePoint Server 2010, side-by-side a collaboration space for various departments. The IT department for Litware is migrating a SharePoint 2010 environment to a new SharePoint 2013 farm. Some collaboration site collections are already migrated, including a Marketing site collection.

#### Business Requirements

##### Intranet

Litware is redefining its brand identity. It is essential that the new intranet supports a wide variety of mobile devices, platforms, and browsers. Some of the content must be migrated from the old intranet during the implementation. The redesigned intranet must be extensible. The solution must be designed with the changes in the underlying technology in mind.

A marketing company named Graphic Design Institute provides documents and guidelines for the new design for Litware's intranet.

##### Collaboration Litware has the following collaboration requirements:

- The collaboration space must include a start page containing information about site owners, contact data, and statistics on site usage. This information must be available for each collaboration space, directly after its creation.
- The project must be delivered in multiple phases.
- The solution must support changes and updates on the structure and functionality of the collaboration spaces.

##### Marketing collaboration space

Auditors must be able to create reports about the documents the Marketing team produces. Initial reports should show document distribution over projects and information about the most active documents, the top inactive documents, and the most active users. Additional reports will be added over time.

#### Technical Requirements

##### Technical Requirements

- Publishing Design for the Intranet Litware will use the following web application for the intranet: <https://intranet.litwareinc.com>.
- The publishing site design is delivered as a set of HTML files (litwarepublishing.html), CSS (Litwarepublishing.css), and image files from the marketing company.
- A design package must be created for easier deployment over various platforms.
- During the creation and application of the design package to the publishing site, SharePoint 2013 out-of-the-box capabilities must be used as much as possible to ensure simple design changes and to simplify the upgrade procedures.
- The publishing site must support rendering on a number of devices, starting with Windows Phone.

- Apart from being deployed on all existing publishing sites, the design package must be automatically applied each time a publishing site is created.
- A search box must be available on all publishing sites.

### **Collaboration**

Litware will use two additional web applications for the collaboration:

- Collaboration 1: <https://collab1.litwareinc.com>
- Collaboration 2: <https://collab2.litwareinc.com>

Most of the features contained within the Team Site template are sufficient; however, a few additions to the template must be made to support the business requirements. In order to achieve this and ensure maximum portability, a web template based on the Team Site definition must be created.

A three-state workflow must be used to manage business processes. A customized default home page must be deployed by using a site feature.

Feature IDs:

- Three-state workflow: FDE5D850-671E-4143-950A-87B473922DC7
- Litware Web Artifacts: DBF80SAB-03D9-43DC-9154-52D6AC54689F

The project must be implemented in phases, so a solution must be developed to support upgrade procedures.

As soon as the package containing the web template Litware.Intranet.Templates.wsp is deployed, the Litware Team Site template must be available for use in all site collections.

In order to make the solution as extensible as possible, all core functionality should be moved to the separate package Litware.Intranet.Core.wsp.

Deployment of the package containing the Litware web templates Litware.Intranet.Templates.wsp must be prevented if the core package is not deployed in order to prevent deployment errors and eventually damage on the site structure itself.

Litware.Intranet.Templates contains two features:

- The LitwareWebTemplateFeature feature contains the Litware Team Site web template. Templates with this title must be available in the group Litware in the template selection.
- The LitwareWebArtifacts hidden feature contains code required to run after the provisioning is completed. The LitwareWebArtifacts feature can be activated only if the LitwareWebTemplateFeature feature is activated as well.

### **Marketing site collection**

An existing marketing collaboration site located in a web application named Collaboration 1 is located at <https://collab1.litwareinc.com/sites/marketing>.

- Collaboration 1 contains a document library with approximately 9000 documents for approximately 200 projects.
- The largest project contains 120 files.
- Documents are assigned to appropriate projects by using the Projects field.
- The farm uses the default throttle settings.
- Users report that they cannot sort documents in the marketing collaboration site.

Auditors have access to the page that provides statistics on Marketing documents. This page contains a report on document distribution over projects

and information about the most active documents, the top inactive documents, and the most active users. Processing the queries can result in working with huge result sets. You must ensure that the information on this page is always available and that the queries are not throttled. The relevant code segment is available in the code sections area (MarketingAudit.ascx.cs).

## Application Structure

- **Application Structure:**

Relevant portions of the app files are shown below.

(Line numbers in the code segments are included for reference only and include a two-letter prefix that denotes the specific file to which they belong.)

- **Element.xml file from Litware.Intranet.Templates.wsp:**

```
PB01 <?xml version="1.0" encoding="utf-8"?>
PB02 <Elements xmlns="http://schemas.microsoft.com/sharepoint/">
PB03   <PropertyBag ParentType="Web">
PB04     <Property Name="litware.teamsite.wt_ID"
PB05       Type="string" Value="WTLitwareTeamSite" />
PB06   </PropertyBag>
PB07 </Elements>
```

- **MarketingAudit.ascx.cs:**

```
MA01 protected override void RenderContents(System.Web.UI.HtmlTextWriter writer)
MA02 {
MA03     SPWeb spWeb = SPContext.Current.Web;
MA04     SPList spList = spWeb.Lists["Documents"];
MA05     SPUser spUser = SPContext.Current.Web.CurrentUser;
MA06     SPQuery spQuery = new SPQuery();
MA07
MA08
MA09
MA10     if (spUser.IsSiteAdmin || spUser.IsSiteAuditor)
MA11     {
MA12         ...
MA13     }
MA14     else
MA15     {
MA16         writer.Write("<p> You do not have enough privileges to run this report.
           Please contact your system administrator. </p>");
MA17     }
MA18
MA19     base.RenderContents(writer);
MA20 }
```

## QUESTION 1

### Question 1

You create a document reporting Web Part for the Marketing team auditors. You need to configure throttling for the Web Part.

Which code segment should you insert at line MA08?

- A. `spQuery.QueryThrottleMode = SPQueryThrottleOption.Strict;`
- B. `spQuery.QueryThrottleMode = SPQueryThrottleOption.Override;`
- C. `spQuery.QueryThrottleMode = SPQueryThrottleOption.Disable;`
- D. `spQuery.QueryThrottleMode = SPQueryThrottleOption.Default;`

**Correct Answer:** B

**Section:** [none]

**Explanation**

**Explanation/Reference:**

From scenario:

Processing the queries can result in working with huge result sets. You must ensure that the information on this page is always available and that the queries are not throttled.

**QUESTION 2****Question 2**

You need to create a design package for the publishing sites.

What should you do?

- A. Use SharePoint Designer to create master pages and a design package.
- B. Use Visual Studio 2012 to create master pages and generate a design package.
- C. Use display templates.
- D. Use Design Manager.

**Correct Answer:** D

**Section:** [none]

**Explanation****Explanation/Reference:**

Before you can use Design Manager, you need a design. You can create your own, or use a ready-made website template. A "design" is simply a group of files that implement the visual design of your site, most commonly:

- At least one HTML file that will be converted into a SharePoint master page
- One or more CSS files
- JavaScript files
- Images
- Other supporting files

<http://msdn.microsoft.com/en-us/library/jj822363.aspx>

From scenario:

It is essential that the new intranet supports a wide variety of mobile devices, platforms, and browsers.

The publishing site design is delivered as a set of **HTML files** (litwarepublishing.html), **CSS** (Litwarepublishing.css), and **image files** from the marketing company.

During the creation and application of the design package to the publishing site, SharePoint 2013 out-of-the-box capabilities must be used as much as possible to ensure simple design changes and to simplify the upgrade procedures. The publishing site must support rendering on a number of devices, starting with Windows Phone.

**QUESTION 3****Question 3**

You need to create a collaboration template.

How should you complete the relevant code?

(To answer, drag the appropriate code segments to the correct location or locations in the answer area. Each code segment may be used once, more than once, or not at all.)

**Select and Place:**

**Answer Area**

```
<?xml version="1.0" encoding="utf-8"?>  
<Elements xmlns="http://schemas.microsoft.com/sharepoint/">  
< [ ]  
 [ ] = "STS"  
 BaseTemplateID="0"  
 BaseConfigurationID="0"  
 [ ] = "LitwareTeamSite"  
 [ ] = "Litware Team Site"  
 [ ] = "Litware"/>  
</Elements>
```

**Correct Answer:**

Answer Area

Name

Title

Template

TemplateID

WebTemplate

DisplayCategory

BaseTemplateName

```

<?xml version="1.0" encoding="utf-8"?>
<Elements xmlns="http://schemas.microsoft.com/sharepoint/">
  < WebTemplate
    BaseTemplateName="STS"
    BaseTemplateID="0"
    BaseConfigurationID="0"
    Name="LitwareTeamSite"
    Title="Litware Team Site"
    DisplayCategory="Litware"/>
</Elements>

```

**Section: [none]**  
**Explanation**

**Explanation/Reference:**

From Scenario:

Most of the features contained within the Team Site template are sufficient; however, a few additions to the template must be made to support the business requirements. In order to achieve this and ensure maximum portability, a web template based on the Team Site definition must be created.

**QUESTION 4**

**Question 4**

You need to apply the Design Package to all of the required sites.

How should you complete the relevant code?

(To answer, drag the appropriate code segments to the correct location or locations in the answer area. Each code segment may be used once, more than once, or not at all).

Select and Place:

	Answer Area
LitwareIncTemplate#0	<pre>&lt;?xml version="1.0" encoding="utf-8"?&gt; &lt;Elements xmlns="http://schemas.microsoft.com/sharepoint/"&gt;   &lt;     Id="1af9c070-8e74-4554-aa03-4373a812e5ac"     TemplateName=" " /&gt;   &lt;/Elements&gt;</pre>
OSRV#0	
FeatureTemplate	
FeatureTemplateStapler	
BLANKINTERNET#0	
WTLitwareTeamSite	
litware.teamsite.wt_ID	
FeatureWebTemplateAssociation	
FeatureSiteTemplateAssociation	

Correct Answer:

	Answer Area
LitwareIncTemplate#0	<pre> &lt;?xml version="1.0" encoding="utf-8"?&gt; &lt;Elements xmlns="http://schemas.microsoft.com/sharepoint/"&gt;   &lt; FeatureSiteTemplateAssociation     Id="1af9c070-8e74-4554-aa03-4373a812e5ac"     TemplateName=" BLANKINTERNET#0 " /&gt; &lt;/Elements&gt; </pre>
OSRV#0	
FeatureTemplate	
FeatureTemplateStapler	
BLANKINTERNET#0	
WTLitwareTeamSite	
litware.teamsite.wt_ID	
FeatureWebTemplateAssociation	
FeatureSiteTemplateAssociation	

**Section:** [none]

**Explanation**

**Explanation/Reference:**

From Scenario:

**Publishing** Design for the Intranet.

Apart from being deployed on all existing publishing sites, the design package must be automatically applied each time a publishing site is created.

STS#0 Team Site

BLANKINTERNET#0 Publishing Site

OSRV#0 Shared Services Administration Site

**FeatureSiteTemplateAssociation** element associates the specified Features with the specified site definition configuration so that when Web sites are provisioned, the Features are automatically included.

<http://msdn.microsoft.com/en-us/library/office/aa544552.aspx>

<http://www.sharepointcolumn.com/sharepoint-2013-webtemplates/>

## QUESTION 5

### Question 5

You implement the dependency changes based on the requirements for the Litware web artifacts feature. When you deploy the Litware.Intranet.Templates.wsp package, you receive an error message.

You need to ensure that the package deploys successfully.

What should you do?

- A. Set the scope of the Litware web artifacts feature to SPSite.
- B. Set the scope of the Litware web artifacts feature to SPFarm.
- C. Set the Is Hidden option of the Litware web artifacts feature to False.
- D. Set the Auto Activate in Central Admin parameter of the Litware web artifacts feature to True.

**Correct Answer:** C

**Section:** [none]

**Explanation**

**Explanation/Reference:**

Hidden Features cannot have activation dependencies.

<http://msdn.microsoft.com/en-us/library/office/aa543162%28v=office.14%29.aspx>

From scenario:

- The LitwareWebTemplateFeature feature contains the Litware Team Site web template. Templates with this title must be available in the group Litware in the template selection.
- The LitwareWebArtifacts **hidden** feature contains code required to run after the provisioning is completed.
- The LitwareWebArtifacts feature can be activated only if the LitwareWebTemplateFeature feature is activated as well.

## QUESTION 6

### Question 6

You need to ensure that users can sort files by using the Projects field.

From the List Settings page, which option should you select?

(To answer, select the appropriate option in the answer area.)

**Hot Area:**

## Columns

A column stores information about each document in the document library. The following columns are currently available in this document library:

Column (click to edit)	Type	Required
Title	Single line of text	
Project	Lookup	

---

<a href="#">Create column</a>
<a href="#">Add from existing site columns</a>
<a href="#">Column ordering</a>
<a href="#">Indexed columns</a>

Correct Answer:

## Columns

A column stores information about each document in the document library. The following columns are currently available in this document library:

Column (click to edit)	Type	Required
Title	Single line of text	
Project	Lookup	

---

- Create column
- Add from existing site columns
- Column ordering
- Indexed columns

**Section:** [none]

**Explanation**

**Explanation/Reference:**

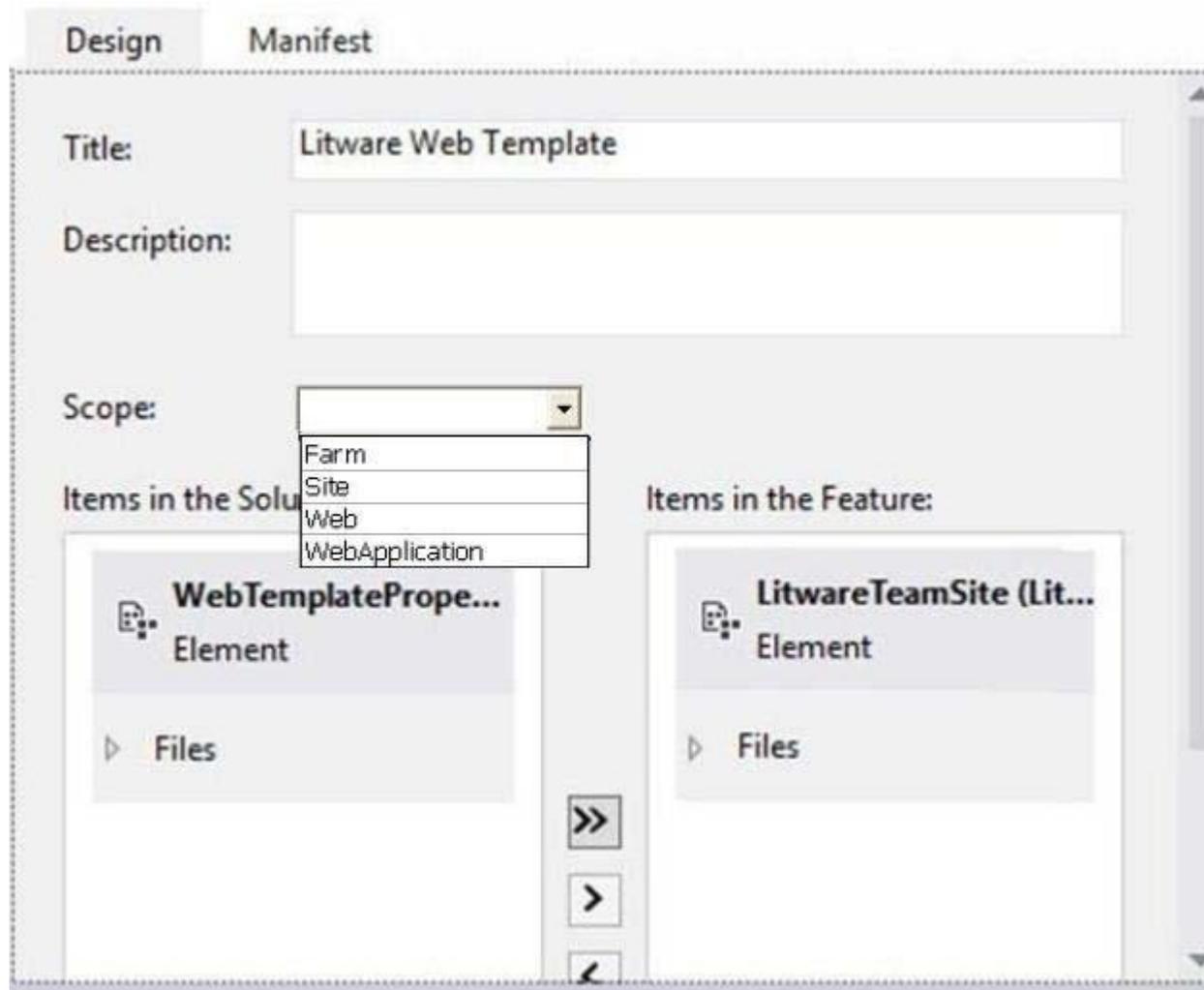
### QUESTION 7

#### Question 7

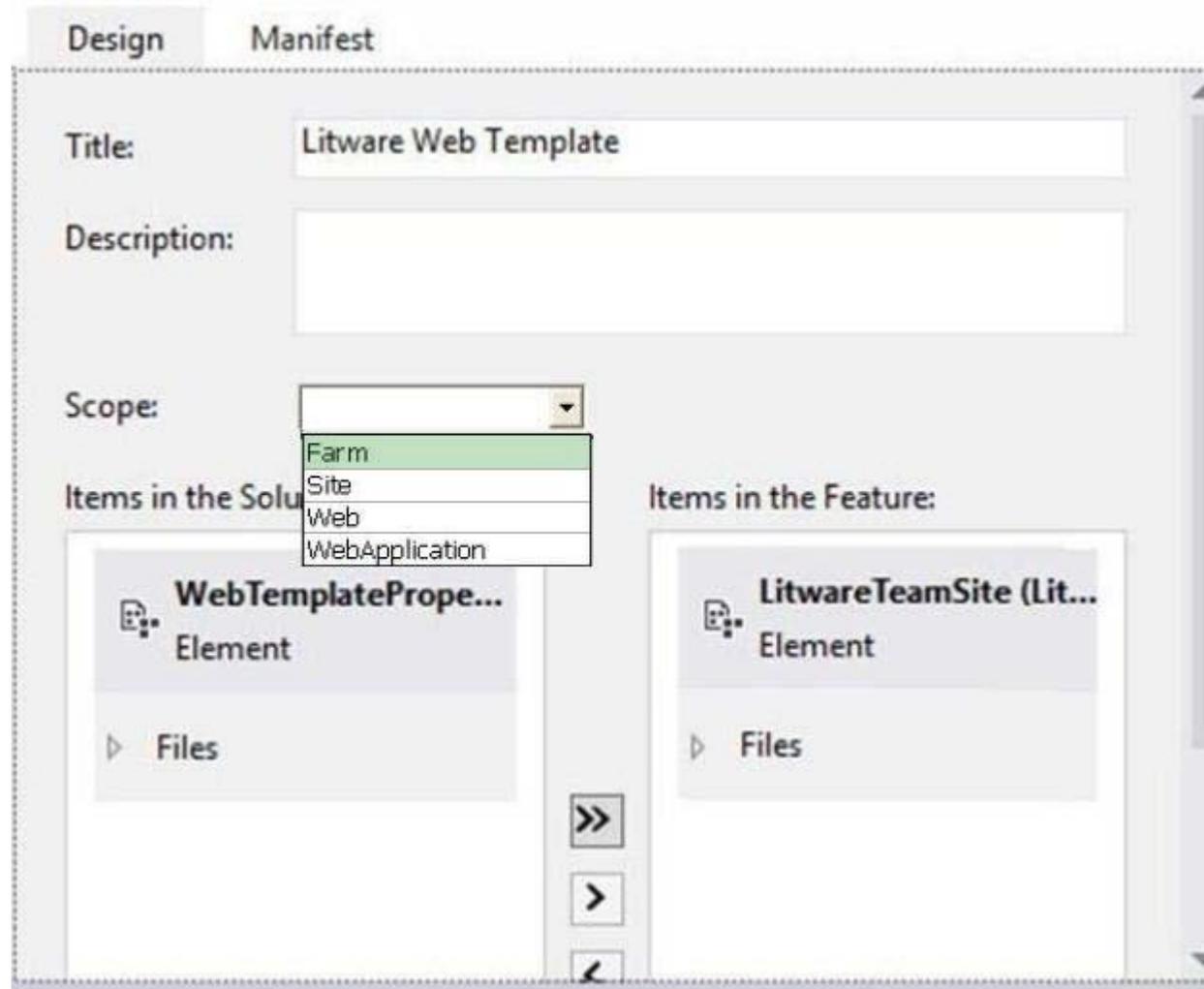
You need to scope the feature containing the Litware Team Site template. In the Feature Designer tool in Visual Studio 2012, which scope option should you select?

(To answer, select the appropriate scope from the drop-down list in the answer area.)

**Hot Area:**



Correct Answer:



**Section:** [none]

**Explanation**

**Explanation/Reference:**

From scenario:

As soon as the package containing the web template Litware.Intranet.Templates.wsp is deployed, the Litware Team Site template must be available for use in **all site collections**

<http://whitepages.unlimitedviz.com/2010/10/how-to-build-a-site-collection-template-from-a-web-template-in-sharepoint-2010/>

**QUESTION 8**

**Question 8**

You need to configure the publishing site to support the browser requirements.

From Site Settings, which option should you select first?  
(To answer, select the appropriate option in the answer area.)

**Hot Area:**

Site Settings

Users and Permissions

- People and groups
- Site permissions
- Site collection administrators
- Site app permissions

Web Designer Galleries

- Site columns
- Site content types
- Web parts
- List templates
- Master pages and page layouts
- Solutions
- Themes
- Composed looks

Look and Feel

- Design Manager
- Master page
- Page layouts and site templates
- Welcome Page
- Title, description, and logo
- Device Channels
- Tree view
- Change the look
- Import Design Package
- Navigation
- Image Renditions

Site Actions

- Manage site features

**Correct Answer:**

# Site Settings

## Users and Permissions

People and groups  
Site permissions  
Site collection administrators  
Site app permissions

## Web Designer Galleries

Site columns  
Site content types  
Web parts  
List templates  
Master pages and page layouts  
Solutions  
Themes  
Composed looks

## Look and Feel

### Design Manager

Master page

Page layouts and site templates

Welcome Page

Title, description, and logo

Device Channels

Tree view

Change the look

Import Design Package

Navigation

Image Renditions

## Site Actions

Manage site features

**Section:** [none]

**Explanation**

### **Explanation/Reference:**

From scenario:

- It is essential that the new intranet supports a wide variety of mobile devices, platforms, and browsers.
- The publishing site must support rendering on a number of devices, starting with Windows Phone.

### **QUESTION 9**

#### **Question 9**

You need to ensure that the features required for the Litware Team Site web template are referenced correctly in the ONET.XML file.

How should you complete the relevant code?

(To answer, drag the appropriate code segments to the correct location or locations in the answer area. Each code segment may be used once, more than once, or not at all.)

**Select and Place:**

	Answer Area
WebFeatures	<pre>&lt;Configuration ID="0" Name="Default"   MasterUrl="_catalogs/masterpage/seattle.master"&gt;   &lt;SiteFeatures&gt;     &lt;Feature ID=" " /&gt;   &lt;/SiteFeatures&gt;   &lt;   &gt;   &lt;Feature ID=" " /&gt;   &lt;/   &gt; &lt;/Configuration&gt;</pre>
FarmFeatures	
SiteCollectionFeatures	
DBF805AB-03D9-43DC-9154-52D6AC54689F	
FDE5D850-671E-4143-950A-87B473922DC7	

**Correct Answer:**

	Answer Area
WebFeatures	<pre>&lt;Configuration ID="0" Name="Default" MasterUrl="_catalogs/masterpage/seattle.master"&gt; &lt;SiteFeatures&gt;   &lt;Feature ID=" FDE5D850-671E-4143-950A-87B473922DC7 " /&gt; &lt;/SiteFeatures&gt; &lt; WebFeatures &gt;   &lt;Feature ID=" DBF805AB-03D9-43DC-9154-52D6AC54689F " /&gt; &lt;/ WebFeatures &gt; &lt;/Configuration&gt;</pre>
FarmFeatures	
SiteCollectionFeatures	
DBF805AB-03D9-43DC-9154-52D6AC54689F	
FDE5D850-671E-4143-950A-87B473922DC7	

Section: [none]

Explanation

Explanation/Reference:

**Question Set 1**

**QUESTION 1**

**Question 1**

You develop a reusable workflow on a development site by using SharePoint Designer. The workflow must be made available to a test site on a different SharePoint environment. You need to deploy and start the workflow on the test site by using Microsoft Visual Studio 2012.

Which three actions should you perform in sequence?

(To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

**Select and Place:**

The interface consists of a list of actions on the left and an 'Answer Area' on the right. The actions are:

- Use SharePoint Designer to save the workflow as a .wsp solution package.
- Use Visual Studio to activate the workflow feature.
- Use Visual Studio to activate the solution package.
- Upload the solution package to the desired site.
- Import the solution package into Visual Studio.
- Use Visual Studio to export the workflow as a .wsp solution package.

The 'Answer Area' is currently empty.

**Correct Answer:**

	Answer Area
	Use SharePoint Designer to save the workflow as a .wsp solution package.
Use Visual Studio to activate the workflow feature.	Import the solution package into Visual Studio.
Use Visual Studio to activate the solution package.	Upload the solution package to the desired site.
Use Visual Studio to export the workflow as a .wsp solution package.	

**Section:** [none]

**Explanation**

**Explanation/Reference:**

Anonymous: Answer

The screenshot shows a hot area interface with a question on the left and an answer area on the right. The question area contains three yellow boxes with the following text:

- Use Visual Studio to activate the workflow feature.
- Use Visual Studio to activate the solution package.
- Upload the solution package to the desired site.

The answer area is titled "Answer Area" and contains three yellow boxes with the following text:

- Use Visual Studio to export the workflow as a .wsp solution package.
- Use SharePoint Designer to save the workflow as a .wsp solution package.
- Import the solution package into Visual Studio.

## QUESTION 2

### Question 2

A company's IT department implements a Help Desk Ticketing system that involves workflow development by using SharePoint Designer and InfoPath.

The Help Desk Ticket workflow involves multiple steps and tasks that have serial approvals of multiple users and groups with custom task email messages.

The Approver accidentally rejects a workflow step, and the workflow has stopped. The Approver then corrects the step.

You need to continue the workflow to reflect the updated approval.

Which activity should you use? (To answer, select the appropriate action from the list of actions in the answer area.)

### Hot Area:

Set Workflow Status

Set Workflow Variable

#### List Actions

Check In Item

Check Out Item

Copy Document

Create List Item

Delete Item

Discard Check Out Item

Set Field in Current Item

Translate Document

Update List Item

Wait for Event in List Item

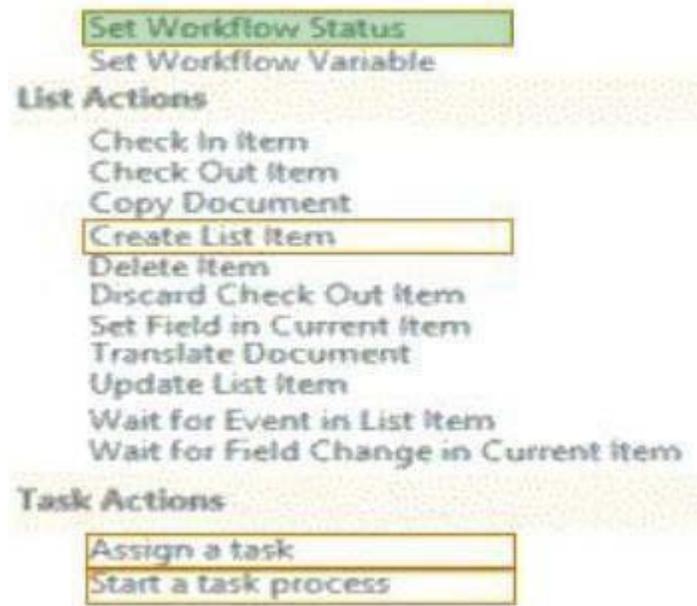
Wait for Field Change in Current Item

#### Task Actions

Assign a task

Start a task process

Correct Answer:



Section: [none]  
Explanation

Explanation/Reference:

### QUESTION 3 Question 3

You develop a SharePoint app to create an approval workflow for expense reports. The app must collect user input before starting the workflow. You need to use ASP.NET forms in the workflow.

Which form type should you use?

- A. Workflow input form
- B. Workflow initiation form
- C. Workflow task form
- D. Workflow modification form

Correct Answer: B  
Section: [none]

## Explanation

### Explanation/Reference:

## QUESTION 4

### Question 4

You plan to create a workflow design by using Microsoft Visio 2013 and then import the design into SharePoint Designer 2013.

You need to ensure that you have repetition capability. Which shape should you use?

- A. Stage
- B. Assign a Task
- C. Step
- D. Loop

**Correct Answer:** D

**Section:** [none]

### Explanation

### Explanation/Reference:

<http://msdn.microsoft.com/en-us/library/jj163272>

### Stage shapes

A stage can contain any number of shapes and may include branching. However, there can be only one path into a stage (and a step) and one path out. All actions in the workflow must be contained by a stage.

### Loop shapes

Loops are a series of connected shapes that will execute as a loop, returning from the last shape in the series to the first, until a condition is satisfied.

### Step shapes

Steps represent a grouped series of sequential actions. Steps must be contained by a stage. A step shape must also have an Enter and Exit shape to define the paths in and out of the shape.

---

*Sam/Anonymous/Niki: Answer A*

## QUESTION 5

### Question 5

You plan to create a SharePoint Business Process Automation (BPA) project.

You need to process items for approval with the least amount of developer effort.

Which tool should you use?

- A. Remote Event Receiver
- B. Out-of-the-box workflow
- C. SharePoint Designer workflow
- D. Work Item Timer Job

**Correct Answer:** B

**Section:** [none]

**Explanation**

**Explanation/Reference:**

## **QUESTION 6**

### **Question 6**

You need to create a workflow custom activity to use in a custom action in SharePoint by using Microsoft Visual Studio 2012.

Which five actions should you perform in sequence?

(To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

**Select and Place:**

Answer Area

Create a new custom action by using SharePoint Designer.

Activate the feature.

Deploy the SharePoint solution package (.wsp) file.

Package the custom activity as a SharePoint solution package (.wsp) file.

Add a new item named **Workflow Custom Activity** to the project.

Add new actions to the design surface and configure and connect the new actions as needed.

Package the custom activity as a template (.stp) file.

**Correct Answer:**

	Answer Area
Create a new custom action by using SharePoint Designer.	Add a new item named <b>Workflow Custom Activity</b> to the project.
	Add new actions to the design surface and configure and connect the new actions as needed.
	Package the custom activity as a SharePoint solution package (.wsp) file.
	Deploy the SharePoint solution package (.wsp) file.
	Activate the feature.
Package the custom activity as a template (.stp) file.	

**Section:** [none]  
**Explanation**

**Explanation/Reference:**

*Sam:* First action "Create a new custom action by using SharePoint Designer"

*Anonymous:* Answer

Answer Area	
	Activate the feature.
	Create a new custom action by using SharePoint Designer.
Deploy the SharePoint solution package (.wsp) file.	Add new actions to the design surface and configure and connect the new actions as needed.
Package the custom activity as a SharePoint solution package (.wsp) file.	Package the custom activity as a template (.stp) file.
	Add a new item named <b>Workflow Custom Activity</b> to the project.

## QUESTION 7

### Question 7

Contoso uses a SharePoint site that contains subsites. Each subsite represents different projects. Each project site is based on a team site template and stores information and documents.

Contoso has five teams: Manufacturing, Sales, Administration, Marketing, and IT. You must create a different look and feel for each team site such that any visitor to the site can identify the team by looking at the colors, fonts, and background image of the site. You need to create a different look and feel for each team.

What should you do? (Each correct answer presents part of the complete solution. Choose all that apply.)

- A. Open Contoso Corporate Microsoft PowerPoint Slides Template, save the template as ContosoCorporate.master, and then upload it to the Theme Gallery.
- B. From SharePoint Designer, go to Content Types. Right-click and select Content Type Settings.
- C. Get a site background image for each team and upload it to the site collection images library. Then create a new master page for each team site by using the Master Page Gallery. Set the version to 15.
- D. From the Web Designer Galleries, choose Composed Looks and create a new item for each team site. Specify the title, URL of the master page, theme, background image, and font schema file.

- E. On the Site Settings page in the Look and Feel section, choose Change the look.
- F. Create a new font XML schema with a font specification for each team.

**Correct Answer:** DEF

**Section:** [none]

**Explanation**

**Explanation/Reference:**

\* Content types enable site users to quickly create specialized kinds of content by using the New Item or New Document command in a list or library. Content types provide site owners a way to make sure that that content is consistent across sites. Site owners can pre-configure specific details about the content when they set up content types for a site, list, or library.

D:

\* A Composed Look is made up of:

- Master Pages
- CSS
- Color palettes
- Font palettes
- Background image

---

Sam/Anonymous: Answer BCD

*LWilson from United States - Nov 29, 2013:*

The correct answers are C,D, and E. You don't need to edit content types to create a customized look, you also need to apply the customized look that you created in composed looks.

*Niki: Answer DEF*

## **QUESTION 8**

### **Question 8**

A user deploys a sandbox solution. The user cannot activate the solution. You need to ensure that the user can activate the solution.

What should you do? (Each correct answer presents a complete solution. Choose all that apply.)

- A. Grant permission to the user to execute the solution.
- B. Grant permission to the user to activate the solution.
- C. Start the Microsoft SharePoint Foundation Sandboxed Code Service.
- D. Start the PerformancePoint Services.

**Correct Answer:** AC

**Section:** [none]

**Explanation****Explanation/Reference:**

<http://msdn.microsoft.com/en-us/library/ff798382.aspx>

**QUESTION 9****Question 9**

A company uses SharePoint for internal collaboration. SharePoint is deployed on a server farm with a single front-end server, a single application server, and a dedicated database server. You review existing Web Parts that read from and write to SharePoint lists. You find the following code in one of the utility classes and notice memory leaks in the method.

```
Private void ChangeSiteDescription(string SiteUrl, string newSiteDescription)
{
    SPSite siteCollection = null;
    try
    {
        siteCollection = new SPSite(SiteUrl);
        using (SPWeb site = siteCollection.RootWeb)
        {
            site.Description = newSiteDescription;
            site.Update();
        }
    }
    catch (Exception)
    {
        siteCollection.Close();
    }
}
```

You need to ensure that there are no memory leaks in the method. What should you do?

- A. Add a finally statement and include site.Dispose().
- B. Add site.Dispose() to the catch statement.
- C. Add a finally statement and include siteCollection.Dispose();
- D. Add siteCollection.Dispose() to the catch statement.

**Correct Answer: C**

**Section: [none]**  
**Explanation**

**Explanation/Reference:**

**QUESTION 10**

**Question 10**

You troubleshoot the sandbox solutions that your team builds. You need to redeploy a sandbox solution. You also need to identify which process must be debugged.

Where should you redeploy the solution, and which process should you debug?

(To answer, drag the appropriate statements to the correct location or locations in the answer area. Each statement may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)

**Select and Place:**

Answer Area	
Process to debug	
Location where the solution is deployed	

**Correct Answer:**

Answer Area	
Process to debug	SPUCWorkerProcess.exe
Location where the solution is deployed	Solution Gallery

Farm
W3wp.exe
Solution Gallery
Central Administration
SPUCWorkerProcess.exe

**Section: [none]**

**Explanation**

**Explanation/Reference:**

**QUESTION 11**

**Question 11**

You add a site column for an Enterprise Content Management (ECM) project by using the Site Column Designer in Visual Studio 2012.

What will the designer-generated XML look like?

(To answer, drag the appropriate XML elements to the correct location or locations in the answer area. Each XML element may be used once, more than once, or not at all.)

**Select and Place:**

Answer Area

ContentTypeColumn  
Elements  
Field  
ContentType  
Type

```
<?xml version="1.0" encoding="utf-8"?>
< [input type="text"/>
xmlns="http://schemas.microsoft.com/sharepoint/">
< [input type="text"/>
ID="{9a904d11-b76d-4dba-a772-67b2383dd86f}"
Name="SiteColumnB"
DisplayName="Site Column B"
[input type="text"]="Text"
Required="FALSE"
Group="mySiteColumns">
</ [input type="text"/>
</ [input type="text"/>
```

Correct Answer:

Answer Area

ContentTypeColumn  
Elements  
Field  
ContentType  
Type

```
<?xml version="1.0" encoding="utf-8"?>
< Elements
xmlns="http://schemas.microsoft.com/sharepoint/" >
  < Field
ID="{9a904d11-b76d-4dba-a772-67b2383dd86f}"
Name="SiteColumnB"
DisplayName="Site Column B"
Type="Text"
Required="FALSE"
Group="mySiteColumns" >
</ Field >
</ Elements >
```

Section: [none]

Explanation

Explanation/Reference:

#### QUESTION 12

##### Question 12

You have a SharePoint site with one site collection and several subwebs. You develop a feature that installs an event receiver on a list.

The event receiver must send a notification by email when information is modified. Not all subwebs require this functionality.

You need to set the feature scope. From the Add New Feature dialog window, which scope should you use?  
(To answer, select the appropriate scope in the answer area.)

**Hot Area:**

The image shows a screenshot of the 'Add New Feature' dialog window in SharePoint. The dialog has two tabs: 'Design' and 'Manifest'. The 'Design' tab is selected. The 'Title' field contains 'SharePointProject1234 Feature2'. The 'Description' field is empty. The 'Scope' dropdown menu is open, showing four options: 'Farm', 'Site', 'Web', and 'WebApplication'. The 'Items in the Solution' field is partially visible below the dropdown.

**Correct Answer:**

Design Manifest

Title: SharePointProject1234 Feature2

Description:

Scope:

Items in the Solution: Farm, Site, Web, WebApplication

**Section: [none]**

**Explanation**

**Explanation/Reference:**

### **QUESTION 13**

#### **Question 13**

A company uses SharePoint and Microsoft Dynamics CRM for collaboration and customer relationship management. The company uses Active Directory Domain Services (AD DS) for identity management. SharePoint and Microsoft Dynamics CRM are configured to use claims-based authentication. The company wants to authorize user access to SharePoint sites by using roles defined in Microsoft Dynamics CRM. You create a custom claims provider. The provider adds a claim to the claim token for each role a user has in Microsoft Dynamics CRM. The provider also allows a site administrator to find and select roles from Microsoft Dynamics CRM to authorize user access. The custom claims provider must be created as a class library project to meet the unit testing requirements of the company. The custom claims provider project is complete and ready to be packaged for deployment. You need to package and deploy the custom claims provider.

What should you do?

(To answer, drag the appropriate actions to the correct location or locations in the answer area. Each action may be used once, more than once, or not at all.)

**Select and Place:**

Create a deployment project.

Create an empty SharePoint project as a farm solution.

Add a feature to the SharePoint project and set the feature scope to **Web**.

Add a feature to the SharePoint project, set the feature scope to **Farm**, and then specify the **ReceiverAssembly** and the **ReceiverClass** attributes in the Feature.xml file.

Add a class library project to the SharePoint project, and add code to implement claims.

In Solution Explorer, right-click the SharePoint project, choose **Add Reference**, and then select the signed assembly of the claims provider project.

In the SharePoint project inside **Solution Explorer**, double-click the **Package.package** node, add the assembly, and then set the Deployment Target as **GlobalAssemblyCache**.

In the SharePoint management shell, run the Windows PowerShell cmdlet **Add-SPSolution** and then run the Windows PowerShell cmdlet **Install-SPSolution** with the **-GACDeployment** parameter.

Right-click the SharePoint project in Solution Explorer, choose **Package**, and then copy the .wsp file to the SharePoint server.

Right-click the SharePoint project in Solution Explorer, choose **Package**, and then copy the .wsp file to the SharePoint Solutions Gallery on the

## Answer Area

Get Assembly

Create Project

Specify Event Receiver Properties

Add Assembly to SharePoint Project

Generate Solution

Deploy Solution

**Correct Answer:**

Create a deployment project.

Create an empty SharePoint project as a farm solution.

Add a feature to the SharePoint project and set the feature scope to **Web**.

Add a feature to the SharePoint project, set the feature scope to **Farm**, and then specify the **ReceiverAssembly** and the **ReceiverClass** attributes in the Feature.xml file.

Add a class library project to the SharePoint project, and add code to implement claims.

In Solution Explorer, right-click the SharePoint project, choose **Add Reference**, and then select the signed assembly of the claims provider project.

In the SharePoint project inside **Solution Explorer**, double-click the **Package.package** node, add the assembly, and then set the Deployment Target as **GlobalAssemblyCache**.

In the SharePoint management shell, run the Windows PowerShell cmdlet **Add-SPSolution** and then run the Windows PowerShell cmdlet **Install-SPSolution** with the **-GACDeployment** parameter.

Right-click the SharePoint project in Solution Explorer, choose **Package**, and then copy the .wsp file to the SharePoint server.

Right-click the SharePoint project in Solution Explorer, choose **Package**, and then copy the .wsp file to the SharePoint Solutions Gallery on the

## Answer Area

Get Assembly

In Solution Explorer, right-click the SharePoint project, choose **Add Reference**, and then select the signed assembly of the claims provider project.

Create Project

Create an empty SharePoint project as a farm solution.

Specify Event Receiver Properties

Add a feature to the SharePoint project and set the feature scope to **Farm**, and then specify the **ReceiverClass** attributes in the Feature.xml file.

Add Assembly to SharePoint Project

In the SharePoint project in Solution Explorer, double-click the **Package.package** node, add the assembly, and then set the Deployment Target as **GlobalAssemblyCache**.

Generate Solution

Right-click the SharePoint project in Solution Explorer, choose **Package**, and then copy the .wsp file to the SharePoint server.

Deploy Solution

In the SharePoint management shell, run the Windows PowerShell cmdlet **Add-SPSolution** and then run the Windows PowerShell cmdlet **Install-SPSolution** with the **-GACDeployment** parameter.

**Section: [none]**

**Explanation**

**Explanation/Reference:**

<http://msdn.microsoft.com/en-us/library/gg327818.aspx>

<http://msdn.microsoft.com/en-us/library/gg309548.aspx>

**QUESTION 14**

**Question 14**

Adventure Works uses SharePoint for managing project-related documents, information sharing, and tasks management. You develop a SharePoint-hosted app named TasksViewer and deploy it to the Corporate Catalog Site. This app is used only by the Project Management Office (PMO) group. Only users in the PMO group have permission to view and add this app to various project sites. The Adventure Works IT department creates a security group in Active Directory for the PMO.

Currently all of the apps are visible to the Everyone group. You need to ensure that only users in the PMO group can see the app.

Which five actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

**Select and Place:**

Answer Area

Remove the Everyone group from the permissions and then add the PMO group with Read permission.

From Central Administration, select the **Apps** link and then open the Corporate Catalog site.

From Quick Launch, select the **Apps for SharePoint** link.

From Quick Launch, select the **Apps for Office** link.

Open the context menu, select the **Ellipsis** button, select the **Shared With** link, and then select the **Advanced** link.

Select the **Stop Inheriting Permissions** button.

Correct Answer:

	Answer Area
	From Central Administration, select the <b>Apps</b> link and then open the Corporate Catalog site.
	From Quick Launch, select the <b>Apps for SharePoint</b> link.
	Open the context menu, select the <b>Ellipsis</b> button, select the <b>Shared With</b> link, and then select the <b>Advanced</b> link.
From Quick Launch, select the <b>Apps for Office</b> link.	Select the <b>Stop Inheriting Permissions</b> button.
	Remove the Everyone group from the permissions and then add the PMO group with Read permission.

**Section:** [none]

**Explanation**

**Explanation/Reference:**

*Anonymous:* Answer

The screenshot shows a SharePoint interface with a question on the left and an answer area on the right. The question is: "Remove the Everyone group from the permissions and then add the PMO group with Read permission." The answer area is titled "Answer Area" and contains five steps:

- Open the context menu, select the **Ellipsis** button, select the **Shared With** link, and then select the **Advanced** link.
- From Quick Launch, select the **Apps for Office** link.
- Select the **Stop Inheriting Permissions** button.
- From Central Administration, select the **Apps** link and then open the Corporate Catalog site.
- From Quick Launch, select the **Apps for SharePoint** link.

## QUESTION 15

### Question 15

Adventure Works uses SharePoint to store product and order information. Product managers visit the Products list to see the status of each product. They request a feature that will allow them to easily see the recent and old product orders without opening the Products list. The products orders page is located at /sitepages/productorders.aspx, and the product order history page is located at /sitepages/productordershistory.aspx. Both pages require a query string parameter named ProductID.

You need to add custom actions to the Products list by using the least amount of administrative effort. What should you do?

- A. Add an empty element to the SharePoint project. Add a <CustomAction> tag, set the Location element to EditControlBlock, and then use the <UrlAction> tag for a redirect to the custom page.
- B. Create a Windows Application and add a reference to Microsoft.SharePoint.Portal.CustomActions.dll and use the SPCustomActions class to add a custom action.
- C. Open the site in SharePoint Designer. Create a custom List Item Display Template and then apply it to the Products List ViewWeb Part.
- D. Create a visual Web Part. Use a grid view with a template column and hyperlink, and databind the Products list. Add the Web Part to the allItems.aspx page of the Products list.

**Correct Answer:** D

**Section:** [none]

## **Explanation**

### **Explanation/Reference:**

#### **QUESTION 16**

##### **Question 16**

You create an Enterprise Content Management (ECM) project. You write .NET client-side object model (CSOM) code to create a navigation term set in an existing term store to use in a taxonomy-based navigation. You need to complete the code to get a reference to the term store.

How should you complete the relevant code?

(To answer, drag the appropriate code segment to the correct location or locations in the answer area. Each code segment may be used once, more than once, or not at all.)

### **Select and Place:**

```
SPContext.Current.Web
"http://sharepoint.local"
new TaxonomySession(context, null)
TaxonomySession.GetTaxonomySession(context)
session
session, ts => ts.TermStores
GetTermSetsByTermLabel
GetTermSetsByName
```

#### Answer Area

```
int lcid = Thread.CurrentThread.CurrentCulture.LCID;
ClientContext context = new
ClientContext( );
TaxonomySession session =
;
context.Load( );
context.ExecuteQuery();
TermStore store = session.TermStores.FirstOrDefault();
if (store != null)
{
    foreach (TermSet ts in
        store.
            ("Navigation", lcid)
        {
            ...
        }
    }
}
```

Correct Answer:

SPContext.Current.Web	<p>*****</p> <p><b>Answer Area</b></p> <pre> int lcid = Thread.CurrentThread.CurrentCulture.LCID; ClientContext context = new ClientContext( "http://sharepoint.local" ); TaxonomySession session =     TaxonomySession.GetTaxonomySession(context) ; context.Load( session, ts =&gt; ts.TermStores ); context.ExecuteQuery(); TermStore store = session.TermStores.FirstOrDefault(); if (store != null) {     foreach (TermSet ts in         store. GetTermSetsByName             ("Navigation", lcid)         {             ...         }     } </pre>
"http://sharepoint.local"	
new TaxonomySession(context, null)	
TaxonomySession.GetTaxonomySession(context)	
session	
session, ts => ts.TermStores	
GetTermSetsByTermLabel	
GetTermSetsByName	

**Section:** [none]

**Explanation**

**Explanation/Reference:**

public static TaxonomySession GetTaxonomySession(ClientRuntimeContext context)

<http://msdn.microsoft.com/library/microsoft.sharepoint.client.taxonomy.taxonomysession.gettaxonomysession.aspx>

#### QUESTION 17

##### Question 17

Adventure Works uses a SharePoint publishing site to host their public-facing website at <http://www.adventureworks.com>. The website gives external

users the ability to register and sign in to the site to buy Adventure Works products. You notice that publicly registered users see the SharePoint ribbon.

You need to ensure that the SharePoint ribbon is available only to content authors and administrators. What should you do?

- A. In the SharePoint project, add an Empty Element and then use the `<HideCustomAction>` tag to hide the ribbon.
- B. Open the current site master page in SharePoint Designer, place the `SharePoint:SPSecurityTrimmedControl` control around the div tag with the `s4-ribbonrow` ID. Set the `PermissionString` to **ManageSubWeb**.
- C. In the SharePoint project, create a User Control and add the following code segment to hide the ribbon:

```
protected void Page_Load(object sender, EventArgs e)
{
    if (UserHasPermissions(SPContext.Current.Web.CurrentUser))
    {
        SPContext.Current.Site.CommandUIVisible = true;
    }
    else
    {
        SPContext.Current.Site.CommandUIVisible = false;
    }
}
private bool UserHasPermissions(SPUser sPUser)
```

Then place the control in the master page.

- D. Open the current site master page in SharePoint Designer and then place the `SharePoint:SPSecurityTrimmedControl` control around the div tag with the `s4-ribbonrow` ID. Set the `PermissionString` to **AddAndCustomizePages**.
- E. Open the current site master page in SharePoint Designer, find a div tag with the `s4-ribbonrow` ID, and then remove all of the contents of the div.

**Correct Answer:** D

**Section:** [none]

**Explanation**

**Explanation/Reference:**

*There was two versions with different options - V1:ABCD and V2:ABDE*

The ribbon in publishing pages gets activated only for users with a minimum of **"AddAndCustomizePages"**

AddAndCustomizePages – Add, change, or delete HTML pages or Web Part Pages, and edit the Web site using a SharePoint Foundation–compatible editor.

ManageSubwebs – Create subsites such as team sites, Meeting Workspace sites, and Document Workspace sites.

<http://social.msdn.microsoft.com/Forums/en-US/d054d018-bb59-409c-b6dd-8f8e6828dbbd/hide-ribbon-for-site-visitors-read-only->

[addandcustomizepages?forum=sharepointgeneralprevious](#)

Sam/Anonymous: Answer B(V1), E(V2)

**QUESTION 18**

**Question 18**

You have an app named TaskManager published at <http://sharepoint.contoso.com/apps>.

You need to remove the app and ensure that users will no longer be able to use the app by using Windows PowerShell cmdlets.

What should you do?

(To answer, drag the appropriate code segments to the correct location or locations in the answer area. Each code segment may be used once, more than once, or not at all.)

**Select and Place:**

Answer Area

`$instance =`

`http://sharepoint.contoso.com/apps |`  
`where {$_.Title -eq 'TaskManager'}`

Uninstall-SPAppInstance -Identity \$instance

Disable-SPFeature -Identity \$instance

Delete-SPAppInstance -Identity \$instance

Remove-SPServiceApplication \$instance

Get-SPWebApplication

Get-SPAppInstance -Web

**Correct Answer:**

The screenshot displays a PowerShell session. On the left, a list of commands is shown in a scrollable area. On the right, the 'Answer Area' shows the execution of the following commands:

```
$instance =
Get-SPAppInstance -Web
http://sharepoint.contoso.com/apps |
where {$_.Title -eq 'TaskManager'}
Uninstall-SPAppInstance -Identity $instance
```

Section: [none]

Explanation

Explanation/Reference:

#### QUESTION 19

##### Question 19

You have an app named TaskManagerApp that is published at <http://sharepoint.contoso.com/apps>.

You need to remove the app and ensure that users will no longer be able to use the app.

Which Windows PowerShell cmdlets should you run?

- A. `$instance = Get-SPAppInstance`  
`Web http://sharepoint.contoso.com/apps | where {$_.Title -eq 'TaskManagerApp'}`  
`Uninstall-SPAppInstance -Identity $instance`
- B. `$instance = Get-SPWebApplication`  
`http://sharepoint.contoso.com/apps`  
`Uninstall-SPAppInstance -Identity $instance`

- C. `$instance = Get-SPAppInstance`  
`-Web http://sharepoint.contoso.com/apps | where {$_.Title -eq 'TaskManagerApp'}`  
`Disable-SPFeature -Identity $instance -URL http://sharepoint.contoso.com/apps`
- D. `$instance = Get-SPWebApplication`  
`http://sharepoint.contoso.com/apps`  
`Remove-SPServiceApplication $instance`

**Correct Answer:** A

**Section:** [none]

**Explanation**

**Explanation/Reference:**

## **QUESTION 20**

### **Question 20**

You create SharePoint apps for multiple clients. Each client has a unique environment with specific requirements. You need to choose the appropriate hosting location for each app.

What should you do?

(To answer, drag the appropriate hosting options to the correct description in the answer area. Each hosting option may be used once, more than once, or not at all.)

**Select and Place:**

Answer Area

Hosting Option	Description
	App needs to be written by using HTML, JavaScript, and PHP that accesses a MySQL database.
	Load balancing, multi-tenancy, and maintenance will be handled by Windows Azure.
	App will be written by using HTML, JavaScript, and Web Parts.
	App will run on a third-party web hosting service with an ASP.NET platform.

Autohosted  
Provider-hosted  
SharePoint-hosted

Correct Answer:

Answer Area

Hosting Option	Description
Provider-hosted	App needs to be written by using HTML, JavaScript, and PHP that accesses a MySQL database.
Autohosted	Load balancing, multi-tenancy, and maintenance will be handled by Windows Azure.
SharePoint-hosted	App will be written by using HTML, JavaScript, and Web Parts.
Provider-hosted	App will run on a third-party web hosting service with an ASP.NET platform.

Autohosted  
Provider-hosted  
SharePoint-hosted

Section: [none]

## Explanation

### Explanation/Reference:

PHP and MySQL are also available in Azure

[msdn.microsoft.com/en-us/library/office/fp179887.aspx](https://msdn.microsoft.com/en-us/library/office/fp179887.aspx)

<http://www.windowsazure.com/en-us/develop/php/tutorials/website-w-mysql-and-git/>

<http://www.windowsazure.com/en-us/develop/php/>

---

*Sam/Niki/Anonymous:* First answer is Provider

## QUESTION 21

### Question 21

You must select an app model to deploy apps to an Office 365 small business tenant.

The business logic of the apps is located in a remote web application.

What should you do?

- A. Create a SharePoint-hosted app. Implement the business logic by using JavaScript.
- B. Develop provider-hosted apps and integrate data sources with the business logic by using OData.
- C. Deploy the business logic to the host web by using a Full Trust SharePoint solution.
- D. Develop an OData service provider infrastructure and publish the provider to the \_layouts directory

**Correct Answer:** B

**Section:** [none]

### Explanation

### Explanation/Reference:

*Sam/Anonymous:* Answer C

## QUESTION 22

### Question 22

A company has a SharePoint farm that has the following configuration:

- SPWFE1 and SPWFE2 are configured as front-end web servers.
- SPAPP1 and SPAPP2 are configured as application servers.

New servers will be added to the farm.

You implement a solution that contains a custom navigation provider. You need to register a custom navigation provider by using the least amount of

administrative effort. What should you do?

- A. Create a web.solutionname.xml file in the \CONFIG directory and run the copyappbincontent stsadm command.
- B. Edit the ApplicationHost.config file on each SharePoint server.
- C. Edit the web.config file for the web application on all SharePoint servers.
- D. Use the SPWebConfigModification class.

**Correct Answer:** D

**Section:** [none]

**Explanation**

**Explanation/Reference:**

### QUESTION 23

#### Question 23

You need to retrieve data about all the lists in a site by using the REST (Representational State Transfer) API.

Which code segment should you use?

- A. 

```
string siteUrl = "http://server/sites/site";
HttpWebRequest endpointRequest =
(HttpWebRequest)HttpWebRequest.Create(siteUrl.ToString() + "/_api/web/AllLists");
endpointRequest.Credentials = new NetworkCredential("userid", "password", "domain");
endpointRequest.Method = "GET";
endpointRequest.Accept = "application/json;odata=verbose";
HttpWebResponse endpointResponse = (HttpWebResponse)endpointRequest.GetResponse();
```
- B. 

```
string siteUrl = "http://server/sites/site";
HttpWebRequest endpointRequest =
(HttpWebRequest)HttpWebRequest.Create(siteUrl.ToString() + "/_api/web/lists");
endpointRequest.Credentials = new NetworkCredential("userid", "password", "domain");
endpointRequest.Method = "POST";
endpointRequest.Accept = "application/json;odata=verbose";
HttpWebResponse endpointResponse = (HttpWebResponse)endpointRequest.GetResponse();
```
- C. 

```
string siteUrl = "http://server/sites/site";
HttpWebRequest endpointRequest =
(HttpWebRequest)HttpWebRequest.Create(siteUrl.ToString() + "/_api/web/lists");
endpointRequest.Credentials = new NetworkCredential("userid", "password", "domain");
endpointRequest.Method = "GET";
endpointRequest.Accept = "application/json;odata=verbose";
HttpWebResponse endpointResponse = (HttpWebResponse)endpointRequest.GetResponse();
```

D. 

```
string siteUrl = "http://server/sites/site";
HttpWebRequest endpointRequest =
    (HttpWebRequest)HttpWebRequest.Create(siteUrl.ToString() + "/_vti_bin/web/lists");
endpointRequest.Credentials = new NetworkCredential("userid", "password", "domain");
endpointRequest.Method = "GET";
endpointRequest.Accept = "application/json;odata=verbose";
HttpWebResponse endpointResponse = (HttpWebResponse)endpointRequest.GetResponse();
```

**Correct Answer:** C

**Section:** [none]

**Explanation**

**Explanation/Reference:**

## QUESTION 24

### Question 24

A company uses SharePoint for document sharing and collaboration. Users create content types for different types of documents that are created daily. All document content types have ProjectID, Type, and AuditStatus columns. ProductID is not a required field.

The Auditing department requires that every document have a ProjectID within two weeks of the creation date. If a document does not have a ProjectID, the AuditStatus column must show a message for users to specify the ProjectID. For performance reasons, fewer than 50 documents at a time should be processed.

You need to write a work-item timer job to meet the requirement. How should you complete the relevant code?  
(To answer, select the appropriate option from the drop-down list in the answer area.)

**Hot Area:**

```

public class MyWorkItemTimerJob : SPWorkItemJobDefinition
{
    public static readonly
        string WorkItemJobDisplayName =
            "Contoso Work Item Time Job";
    public static readonly Guid WorkItemId =
        new Guid("{4A359645-E5EF-44F3-9523-5CB43D5C0A89}");
    public MyWorkItemTimerJob()

    public override Guid WorkItemType()
    public override void Execute(SPJobState jobState)

    public override string DisplayName

    public int BatchFetchLimit
    public override int BatchFetchLimit = 50;

    public override void Execute(...)
    protected override bool ProcessWorkItem(...)

    private bool IsTwoWeeksOldNow(SPListItem anItem)
}

```

Correct Answer:

```

public class MyWorkItemTimerJob : SPWorkItemJobDefinition
{
    public static readonly
        string WorkItemJobDisplayName =
            "Contoso Work Item Time Job";
    public static readonly Guid WorkItemTypeId =
        new Guid("{4A359645-E5EF-44F3-9523-5CB43D5C0A89}");
    public MyWorkItemTimerJob()

    public override Guid WorkItemType()
    public override void Execute(SPJobState jobState)

    public override string DisplayName

    public int BatchFetchLimit
    public override int BatchFetchLimit = 50;

    public override void Execute(...)
    protected override bool ProcessWorkItem(...)

    private bool IsTwoWeeksOldNow(SPListItem anItem)
}

```

**Section:** [none]

**Explanation**

**Explanation/Reference:**

**ProcessWorkItems** Launches the processing of work items and specifies the content database, the work item collection that contains the work items, and the current state of the pausable timer jobs.

**BatchFetchLimit** Gets an integer specifying the limit imposed on the batch size of the work-item collection.

**Execute** Execute the job definition based on the given job instance identifier.

[http://msdn.microsoft.com/en-us/library/microsoft.sharepoint.administration.spworkitemjobdefinition\\_members.aspx](http://msdn.microsoft.com/en-us/library/microsoft.sharepoint.administration.spworkitemjobdefinition_members.aspx)

**QUESTION 25**

**Question 25**

You need to create workflows for your business processes by using the least amount of development effort.

Which four actions should you perform in sequence?

(To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

**Select and Place:**

	Answer Area
Verify and use the out-of-the-box workflows for the objective.	
Verify and use SharePoint Designer workflows without creating any custom activities in Visual Studio.	
Import Activity Designer from the Windows Azure websites.	
Use Microsoft Visual Studio 2012 to create the workflow custom activities.	
Use SharePoint Designer to create a workflow definition by using the activities.	

**Correct Answer:**

	Answer Area
	Verify and use the out-of-the-box workflows for the objective.
	Verify and use SharePoint Designer workflows without creating any custom activities in Visual Studio.
Import Activity Designer from the Windows Azure websites.	Use Microsoft Visual Studio 2012 to create the workflow custom activities.
	Use SharePoint Designer to create a workflow definition by using the activities.

**Section:** [none]

**Explanation**

**Explanation/Reference:**

*Sam: Answer*

Verify and use SharePoint Designer workflows without creating any custom activities in Visual Studio.

Import Activity Designer from the Windows Azure websites.

Use Microsoft Visual Studio 2012 to create the workflow custom activities.

Use SharePoint Designer to create a workflow definition by using the activities.

*Anonymous: Answer*

Import Activity Designer from the Windows Azure websites.

Use Microsoft Visual Studio 2012 to create the workflow custom activities.

Use SharePoint Designer to create a workflow definition by using the activities.

Verify and use SharePoint Designer workflows without creating any custom activities in Visual Studio.

## **QUESTION 26**

### **Question 26**

You plan to use an app event receiver in conjunction with a remote event receiver. You need to create the remote event receiver by using Visual Studio 2012.

Which three actions should you perform in sequence?

(To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

**Select and Place:**

	Answer Area
Add an item based on the Remote Event Receiver template.	
Upload an item from the Remote Event Receiver template to the library.	
Inherit an item from the Remote Event Receiver template.	
Implement the <b>ProcessEvent</b> method.	
Select the event type in the SharePoint Customization wizard.	

**Correct Answer:**

	Answer Area
	Add an item based on the Remote Event Receiver template.
Upload an item from the Remote Event Receiver template to the library.	Select the event type in the SharePoint Customization wizard.
Inherit an item from the Remote Event Receiver template.	Implement the <b>ProcessEvent</b> method.

**Section: [none]**

**Explanation**

**Explanation/Reference:**

To handle events that occur to items in apps for SharePoint

1. In Visual Studio, open Solution Explorer, and then choose the project node of the app for SharePoint.
2. On the menu bar, choose Project, Add New Item.
3. In the Templates pane, choose **Remote Event Receiver**, specify a name in the Name box, and then choose the Add button. The SharePoint Customization Wizard appears.
4. On the Choose Event Receiver Settings page, **choose an event receiver type**, such as List Item Events.
5. Set the event source to a list whose events you want to handle, such as Announcements.
6. In the list of events to handle, select the check box next to each event that you want to handle, such as An item was added, and then choose the Finish button. A web application is created with a web service that contains a code file. For more information, see Handling events in apps for SharePoint.
7. In the code file for the web service, **add code that will execute every time** the events that you specified occur. The contents of this service match the contents of the web service for a remote event receiver, including the **ProcessEvent()** and **ProcessOneWayEvent()** methods. The code in these events runs when the app events that you specified occur.

```
/* Trigger an event when an item is added to the SharePoint list*/
Public class OnPlantUpdated : IRemoteEventService
{
    public SPRemoteEventResult ProcessEvent (SPRemoteEventProperties properties)
    {
        SPRemoteEventResult result = new SPRemoteEventResult();
        If (properties.EventType == SPRemoteEventType.ItemAdding ||
            properties.EventType == SPRemoteEventType.ItemUpdating)
        {
            // Code to run on item adding or updating.
        }
    }
}
```

<http://msdn.microsoft.com/en-us/library/office/jj220043.aspx>  
<http://msdn.microsoft.com/en-us/library/office/dn456315.aspx>

*Anonymous:* Answer

Add an item based on the Remote Event Receiver template.

Upload an item from the Remote Event Receiver template to the library.

Implement the **ProcessEvent** method.

## QUESTION 27

### Question 27

You create a new Enterprise Content Management (ECM) project. You add a content type to the Visual Studio Project by using the Content Type Designer in Visual Studio 2012.

What will the designer-generated XML look like?

(To answer, drag the appropriate XML elements to the correct location or locations in the answer area. Each XML element may be used once, more than once, or not at all. )

**Select and Place:**

## Answer Area

Column

Elements

FieldRef

FieldRefs

SiteColumn

```
<?xml version="1.0" encoding="utf-8"?>
< [ ] xmlns="http://schemas.microsoft.com/sharepoint/">
  <ContentType ID="0x0100C246DA2BB57D493D916BDD32671C57FA"
    Name="ContentTypeAB"
    Group="myContentTypes"
    Description="ContentTypeAB"
    Inherits="FALSE"
    Version="0">
    < [ ] >
      < [ ] ID="{8fb95db3-0e69-4232-8827-c5b3c6b35333}"
        DisplayName="Site Column A" Required="TRUE" Name="SiteColumnA" />
    </ [ ] >
  </ContentType>
</ [ ] >
```

Correct Answer:

Answer Area

Column

Elements

FieldRef

FieldRefs

SiteColumn

```

<?xml version="1.0" encoding="utf-8"?>
< Elements xmlns="http://schemas.microsoft.com/sharepoint/" >
  <ContentType ID="0x0100C246DA2BB57D493D916BDD32671C57FA"
    Name="ContentTypeAB"
    Group="myContentTypes"
    Description="ContentTypeAB"
    Inherits="FALSE"
    Version="0">
    < FieldRefs >
      < FieldRef ID="{8fb95db3-0e69-4232-8827-c5b3c6b35333}"
        DisplayName="Site Column A" Required="TRUE" Name="SiteColumnA" />
    </ FieldRefs >
  </ContentType>
</ Elements >

```

Section: [none]

Explanation

Explanation/Reference:

### QUESTION 28

#### Question 28

You work on a SharePoint Enterprise Content Management (ECM) project. You develop the Litware Document Approval workflow that enables a group of people to review, approve, or reject documents and document changes. You need to assign the Litware Document Approval workflow to the Document content type.

How should you complete the relevant code?

(To answer, drag the appropriate code segments to the correct location or locations in the answer area. Each code segment may be used once, more than once, or not at all.)

**Select and Place:**

"Tasks"

"WF History"

Lists["Documents"]

spWeb.Lists["Tasks"]

CreateListAssociation

ContentTypes["Document"]

spWeb.Lists["WF History"]

CreateWebContentTypeAssociation

**Answer Area**

```
public override void FeatureActivated
(SPFeatureReceiverProperties properties)
{
    SPWeb spWeb = (SPWeb)properties.Feature.Parent;
    var document =
        spWeb.  ;

    SPWorkflowTemplate wfTemplate =
        spWeb.WorkflowTemplates.GetTemplateByName
            ("Litware Document Approval", spWeb.Locale);
    var wfTaskList =  ;
    var wfHistoryList =  ;

    SPWorkflowAssociation wfAssociation =
        SPWorkflowAssociation. 

        (wfTemplate, "Document Approval", wfTaskList, wfHistoryList);
    document.WorkflowAssociations.Add(wfAssociation);
    document.Update();
}
```

**Correct Answer:**

	Answer Area
"Tasks"	<pre> public override void FeatureActivated (SPFeatureReceiverProperties properties) {     SPWeb spWeb = (SPWeb)properties.Feature.Parent;     var document =         spWeb.ContentTypes["Document"];      SPWorkflowTemplate wfTemplate =         spWeb.WorkflowTemplates.GetTemplateByName             ("Litware Document Approval", spWeb.Locale);      var wfTaskList = "Tasks";     var wfHistoryList = "WF History";      SPWorkflowAssociation wfAssociation =         SPWorkflowAssociation.CreateWebContentTypeAssociation             (wfTemplate, "Document Approval", wfTaskList, wfHistoryList);     document.WorkflowAssociations.Add(wfAssociation);     document.Update(); } </pre>
"WF History"	
Lists["Documents"]	
spWeb.Lists["Tasks"]	
CreateListAssociation	
ContentTypes["Document"]	
spWeb.Lists["WF History"]	
CreateWebContentTypeAssociation	

Section: [none]

Explanation

Explanation/Reference:

SPWorkflowAssociation.**CreateWebContentTypeAssociation** method creates a workflow association that can then be added to a content type that is scoped at the website level.

```

public static SPWorkflowAssociation CreateWebContentTypeAssociation(
    SPWorkflowTemplate baseTemplate,
    string name,
    string taskListName,
    string historyListName
)

```

)

SPWorkflowAssociation.**CreateListAssociation** method creates a workflow association that can then be added to a list.

```
public static SPWorkflowAssociation CreateListAssociation(  
    SPWorkflowTemplate baseTemplate,  
    string name,  
    SPList taskList,  
    SPList historyList  
)
```

SPList.**WorkflowAssociations** property gets the collection of workflow association objects that represents all the workflows that are associated with the list.

<http://msdn.microsoft.com/en-us/library/microsoft.sharepoint.workflow.spworkflowassociation.createlistassociation.aspx>

<http://msdn.microsoft.com/en-us/library/microsoft.sharepoint.workflow.spworkflowassociation.createwebcontenttypeassociation.aspx>

<http://msdn.microsoft.com/en-us/library/microsoft.sharepoint.splist.workflowassociations.aspx>

## QUESTION 29

### Question 29

You develop a SharePoint-hosted app that is used by internal users to read and write data. The app has the following requirements:

- The app must be able to find and display the products that are purchased most often by customers.
- The app must be able to read product information from a custom SQL Server database by using an external list.
- The app must be able to read from and write to the user profile.
- The app must be able to make changes to lists by using the minimum permissions necessary.
- The app must be able to read enterprise keywords.

You need to configure permissions for the app. Which scopes and permissions should you use?

(To answer, select the appropriate options from each drop-down list in the answer area.)

**Hot Area:**

Scope	Permission
<input type="text" value=""/>	QueryAsUserIgnoreAppPrincipal
<ul style="list-style-type: none"> <li>Search</li> <li>Reporting</li> <li>Enterprise Search</li> <li>Enterprise Resources</li> </ul>	
<input type="text" value=""/>	Read
<ul style="list-style-type: none"> <li>BCS</li> <li>Tenant</li> <li>Workflow</li> <li>Site Collection</li> </ul>	
User Profiles	<input type="text" value=""/> <ul style="list-style-type: none"> <li>Read</li> <li>Write</li> <li>Manage</li> <li>Full Control</li> </ul>
Web	<input type="text" value=""/> <ul style="list-style-type: none"> <li>Read</li> <li>Write</li> <li>Manage</li> <li>Full Control</li> </ul>
<input type="text" value=""/>	Read
<ul style="list-style-type: none"> <li>Search</li> <li>Workflow</li> <li>Social Feed</li> <li>Taxonomy</li> </ul>	

**Correct Answer:**

Scope	Permission
<input type="text"/> <ul style="list-style-type: none"> <li>Search</li> <li>Reporting</li> <li>Enterprise Search</li> <li>Enterprise Resources</li> </ul>	QueryAsUserIgnoreAppPrincipal
<input type="text"/> <ul style="list-style-type: none"> <li>BCS</li> <li>Tenant</li> <li>Workflow</li> <li>Site Collection</li> </ul>	Read
User Profiles	<input type="text"/> <ul style="list-style-type: none"> <li>Read</li> <li>Write</li> <li>Manage</li> <li>Full Control</li> </ul>
Web	<input type="text"/> <ul style="list-style-type: none"> <li>Read</li> <li>Write</li> <li>Manage</li> <li>Full Control</li> </ul>
<input type="text"/> <ul style="list-style-type: none"> <li>Search</li> <li>Workflow</li> <li>Social Feed</li> <li>Taxonomy</li> </ul>	Read

**Section: [none]**  
**Explanation**

**Explanation/Reference:**

Search - QueryAsUserIgnoreAppPrincipal

- The app must be able to find and display the products that are purchased most often by customers.

<http://code.msdn.microsoft.com/office/SharePoint-2013-Querying-a629b53b>

Scope	Permission	Propertie
Search	QueryAsUserIgnoreAppPrincipal	

#### BCS - Read

- The app must be able to read product information from a custom SQL Server database by using an external list.

#### User Profiles - Write

- The app must be able to read from and write to the user profile.

#### Web - Manage

- The app must be able to make changes to lists by using the minimum permissions necessary.

#### Taxonomy - Read

- The app must be able to read enterprise keywords.

### QUESTION 30

#### Question 30

You create a solution to access data contained in SharePoint by using a client-side object model (CSOM).

How should you complete the relevant code?

(To answer, drag the appropriate code segments to the correct location or locations in the answer area. Each code segment may be used once, more than once, or not at all.)

**Select and Place:**

### Answer Area

clientContext

collListItem

ExecuteQuery

Load

ExecuteQueryAsync

```
ClientContext [ ] = new ClientContext(siteUrl);  
clientContext.Credentials = new NetworkCredential("userid", "password", "domain");  
SP.List oList = clientContext.Web.Lists.GetByTitle("Dev");  
CamlQuery q = new CamlQuery();  
q.ViewXml = @"<View/>";  
ListItemCollection [ ] = oList.GetItems(q);  
  
clientContext.[ ](collListItem);  
  
clientContext.[ ]();  
  
foreach (ListItem oListItem in collListItem)  
{  
    ...  
}
```

Correct Answer:

```
clientContext
collListItem
ExecuteQuery
Load
ExecuteQueryAsync

Answer Area

ClientContext clientContext = new ClientContext(siteUrl);

clientContext.Credentials = new NetworkCredential("userid", "password", "domain");
SP.List oList = clientContext.Web.Lists.GetByTitle("Dev");
CamlQuery q = new CamlQuery();
q.ViewXml = @"<View/>";

ListItemCollection collListItem = oList.GetItems(q);

clientContext.Load(collListItem);

clientContext.ExecuteQuery();

foreach (ListItem oListItem in collListItem)
{
    ...
}
```

Section: [none]

Explanation

Explanation/Reference:

### QUESTION 31

#### Question 31

Adventure Works uses a web design firm to design the user interface for an upcoming toy sales website, www.toys.adventureworks.com. The website is built by using a SharePoint publishing template.

Adventure Works must implement the newly designed user interface for the site. The design firm provides a set of HTML, CSS, and JavaScript files. You need to create and publish a SharePoint master page by using the supplied files.

What should you do? (Each correct answer presents part of the solution. Choose all that apply.)

- A. From the Master Pages section in SharePoint Designer, select Create New Master Page and then replace the master page contents with the contents of the HTML file.

- B. From SharePoint Designer, open the master page gallery. Right-click the new master page and then select Set as Default Master.
- C. From the Design Manager, map a network drive to the /\_layouts/masterpage/ folder. Then, in Windows Explorer, copy all the UI elements provided by the design team to the network share.
- D. From the Edit Master Page section in Design Manager, select Convert an HTML File to a SharePoint Master Page to generate a master page from the HTML file provided by designer firm.
- E. Publish the master page. Then, from Site Settings, choose the Look and Feel section, and then select Master Page. Choose the master page and select OK.
- F. Preview the master page and select Snippets to get HTML segments of the SharePoint top navigation, quick launch, and body. Then, edit the master page by using Microsoft Notepad and replace the HTML with the new segments.

**Correct Answer:** CDEF

**Section:** [none]

**Explanation**

**Explanation/Reference:**

After you convert your master page and successfully preview it, you are ready to add snippets to the master page. A snippet is an HTML representation of a SharePoint component—such as a navigation control or search box or Web Part—that you can add to your master page. Adding snippets to your master page is how you quickly build the full range of SharePoint functionality into your master page. Adding snippets is basically a three-step process:

- Find and configure snippets in the Snippet Gallery.
- Copy snippets to your HTML master page.
- Preview and style snippets by using CSS.

After you configure a snippet, you copy it to the Clipboard and then paste it at the right spot in your HTML file. Your HTML design may already contain mockup or static controls, in which case you'll want to delete them or comment them out as you replace them with dynamic snippets from the Snippet Gallery.

<http://msdn.microsoft.com/en-us/library/jj822363.aspx>

Note:

D, Not A: To convert the HTML file into a .master file

- Browse to your publishing site.
- In the upper-right corner of the page, choose Settings, and then choose Design Manager.
- In Design Manager, in the left navigation pane, choose Edit Master Pages.
- Choose Convert an HTML file to a SharePoint master page.
- In the Select an Asset dialog box, browse to and select the HTML file that you want to convert. etc

*Sam/Anonymous:* Answer BDE

**QUESTION 32**

**Question 32**

You create a cloud-hosted SharePoint app. You must make the app available in the SharePoint Store for customers to install on their host webs. You need to keep the style and navigation of the app the same as the host web of the app after it is installed by any customer.

What should you do?

- A. Add a reference to SP.UI.Controls.js on the host web. Pass the AppUrl parameter to the host web. Apply branding to the host web.
- B. Copy the CSS file from the app to the host web. Run the Chrome control to convert the CSS file to the host web format. Apply the styles contained in the CSS file to the host web.
- C. Use a Chrome control to find the differences in the styles between the host web and the app. Resolve all of the differences by using JavaScript.
- D. Add a reference to the SP.UI.Controls.js file located in the new /\_layouts/15 directory. Pass the SPHostUrl parameter to the start page of the app. Use the Chrome control in JavaScript.

**Correct Answer: D**

**Section: [none]**

**Explanation**

**Explanation/Reference:**

The chrome control in SharePoint 2013 enables you to use the header styling of a specific SharePoint site in your app without needing to register a server library or use a specific technology or tool. To use this functionality, you must register a SharePoint JavaScript library through a standard `<script>` tag. You can provide a placeholder by using an HTML `div` element and further customize the control by using the available options. The control inherits its appearance from the specified SharePoint website.

```
//load the SharePoint resources
$(document).ready(function () {
    //Get the URI decoded URL.
    hostweburl = decodeURIComponent(getQueryStringParameter("SPHostUrl"));

    // The SharePoint js files URL are in the form:
    // web_url/_layouts/15/resource
    var scriptbase = hostweburl + "/_layouts/15/";

    // Load the js file and continue to the success handler
    $.getScript(scriptbase + "SP.UI.Controls.js", renderChrome)
});
```

Query string:

{StandardTokens}&SPHostTitle={HostTitle}

The chrome control automatically takes the following values from the query string:

- SPHostUrl
- SPHostTitle
- SPAppWebUrl
- SPLanguage

{StandardTokens} include SPHostUrl and SPAppWebUrl.

<http://msdn.microsoft.com/en-us/library/office/fp179916.aspx>

Sam/Anonymous: Answer B

**QUESTION 33**

**Question 33**

You develop an autohosted app for SharePoint. The app will access SharePoint data in the host web. You need to configure the minimum required data access permissions for the app.

How should you configure permissions in the app manifest? (To answer, select the appropriate option from each drop-down list in the answer area.)

**Hot Area:**

Scope	Permissions
<input type="text"/>	<input type="text"/>
Business Connectivity Services (BC)	FullControl
Search	Manage
Web	Read
Workflow	Write

**Correct Answer:**

Scope	Permissions
<input type="text"/>	<input type="text"/>
Business Connectivity Services (BC)	FullControl
Search	Manage
Web	Read
Workflow	Write

**Section:** [none]

**Explanation**

**Explanation/Reference:**