Microsoft

Exam 70-489

Developing Microsoft SharePoint Server 2013 Advanced Solutions

Version: 8.0

[Total Questions: 97]

Topic 1, Trey Research

Background

You develop an intranet portal for Trey Research. End users of the portal are researchers and office staff.

Business Requirements

All end users must be able to customize their profile with relevant information. Researchers must store research papers, upload supporting documents, and search content.

Storage

The portal must use an existing Microsoft SQL Server database to access and store work profile information and research papers.

Data Access

- The portal must use Business Connectivity Services (BCS) to access data from external systems.
- Researchers must search content from SharePoint and external systems.
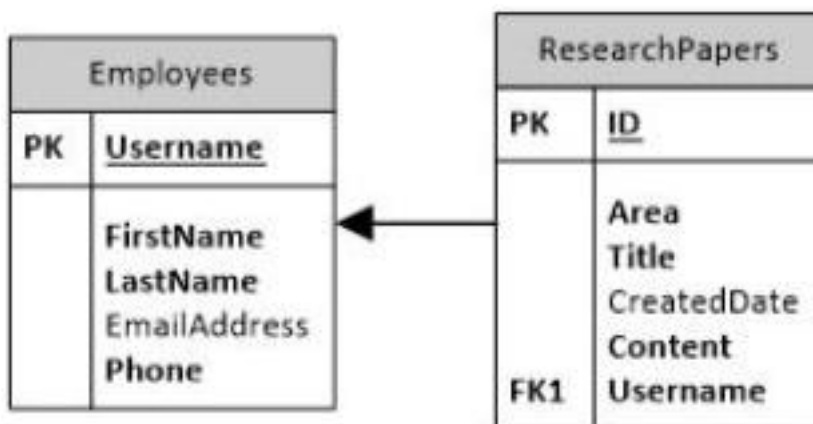- Researchers must manage a research topic and related content as a single entity.

User Profile

- Employees must be able to customize their profile.
- Administrators must be able to create new profile properties.

Technical Requirements

Data Store

The data model for the database entities is shown below:

Users must not be allowed to update the Employees.Username and ResearchPapers.ID fields. The fields uniquely distinguish the corresponding entity.

Access External Data

- You must create an external content type named TreyResearch to access the SQL data source. During development, the data source will be accessible locally.

    ✎ You must develop an app to access the fields named Employee Name and Research Paper Title.

    ✎ Researchers must be able to find all research papers that are written by a particular employee.

    ✎ A research paper always must be associated with the employee that wrote it.

Document Management

    ✎ Researchers must be able to upload research papers and relevant supporting materials into a document set named Research Content.

    ✎ All the document sets must be stored in a list named ResearchPapers.

    ✎ All documents that are uploaded must contain the prefix DOC in the file name.

Environment

The SQL database will be on a different physical server when the solution is deployed to a production environment. The solution must use the SQL Server user named sqltrey to connect to the database. The BCS service is configured and running in the production environment.

Personalize

    ✎ You must use custom profile properties to add a new section to the user profile properties page.

    ✎ The solution must use the client-side object model (CSOM) to upload employee profile pictures.

    ✎ Employees must be able to change their display name on the site.

    ✎ Each employee's page must display the value of the DisplayName and Title fields.

Search

    ✎ The Microsoft Bing API web service must be used to search for research papers. No code must be written.

    ✎ The app must use a Content Enrichment web service named AbstractIndexer. The app must use the AbstractIndexer service to index search content.

    ✎ The solution must store large-sized media files in a dedicated SQL Server database.

    ✎ The database must use the ResearchPapers.ID field as the foreign key to associate the field with the TreyResearch external content type.

Application Structure

Relevant portions of the solution 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.)

App.js

```
AJ01   var context;
AJ02   var web;
AJ03   var user;
AJ04
AJ05
AJ06      $.ajax({
AJ07        url: listURL,
AJ08        headers: {
AJ09          "accept": "application/json",
AJ10          "X-RequestDigest": $("#__REQUESTDIGEST").val()
AJ11        },
AJ12        success: this.showItems,
AJ13        error: this.failMethod
AJ14      });
AJ15      }
AJ16
AJ17     this.showItems = function (data) {
AJ18       $("#Container").children().remove();
AJ19       $.each(data.d.results, function (key, val) {
AJ20         var item = $("#EmployeeInfoTemplate").clone()
AJ21         .attr("id", val.BdcIdentity)
AJ22         .fadeIn("slow");
AJ23         ...
AJ24         item.appendTo("#Container");
AJ25       });
AJ26     }
AJ27
AJ28     this.failMethod = function (jqXHR, textStatus, errorThrown) {
AJ29       alert('failed: ' + errorThrown);
AJ30     }
AJ31   }
AJ32   ExecuteOrDelayUntilScriptLoaded(getEmployees, "sp.js");
AJ33   });
AJ34
AJ35   function getEmployees() {
AJ36     var grid = new AppLevelECT.Grid
("ColumnContainer", 3, _spPageContextInfo.webServerRelativeUrl);
AJ37     grid.init();
AJ38   }
```

ManageUserProfiles.es

```
MP01   namespace ManageUserProfiles
MP02   {
MP03     class ProfileProperties
MP04     {
MP05       public static void AddProfileProperty(string name, string displayName,
bool isMultivalued)
MP06       {
MP07         using (SPSite site = new SPSite("http://treyresearch.com/users"))
MP08         {
MP09           SPServiceContext svcContext = SPServiceContext.GetContext(site);
MP10           try
MP11           {
MP12             ProfilePropertyManager prfPropMgr;
MP13             ProfileSubtypeManager prfTypeMgr;
MP14             ProfileSubtypePropertyManager prftypePropMgr;
MP15             ProfileTypePropertyManager typPropMgr;
MP16             ProfileSubtypeProperty prfTypeProp;
MP17             ProfileTypeProperty prfProp;
MP18             ProfileSubtype prfType;
MP19             CorePropertyManager corePropMgr;
MP20             CoreProperty coreProp;
MP21             prfPropMgr = new UserProfileConfigManager(svcContext)
                 .ProfilePropertyManager;
MP22
MP23             prfTypeProp = prftypePropMgr.Create(prfProp);
MP24             prfTypeProp.IsUserEditable = true;
MP25             prfTypeProp.DefaultPrivacy = Privacy.Public;
MP26             prfTypeProp.UserOverridePrivacy = true;
MP27             prftypePropMgr.Add(prfTypeProp);
MP28           }
MP29           catch (System.Exception e)
MP30           {
MP31             throw new Exception("Error occurred: " + e.ToString());
MP32           }
MP33         }
MP34       }
MP35     }
MP36   }
MP37
MP38
MP39
MP40 public void UploadPicture(string account, string picURL)
MP41 {
MP42   try
MP43   {
MP44
MP45   }
MP46   catch (Exception e)
MP47   {
MP48     throw new Exception("Error occurred: " + e.ToString());
MP49   }
MP50 }
MP51
MP52 public UserProfileProperties GetUserProfileProperties(string account)
MP53 {
MP54   var userprfProps = new UserProfileProperties();
MP55
MP56   var clientContext = new ClientContext("http://treyresearch.com/users");
```

ContentManagement.es

```
CM01   private void CreateDocumentSets()
CM02   {
CM03     using (SPSite site = new SPSite("http://treyresearch.com/sites"))
CM04     {
CM05       using (SPWeb web = site.RootWeb)
CM06       {
CM07
CM08       }
CM09     }
CM10   }
```

Question No : 1 DRAG DROP - (Topic 1)

You need to add code to line MP22 to create the custom profile property.

How should you complete the relevant code? (To answer, drag the appropriate code segments to the correct locations in the answer area. Each code segment may be used once or not at all. You may need to drag the split bar between panes or scroll to view content.)

```
Answer Area

corePropMgr = prfPropMgr.GetCoreProperties();

coreProp = corePropMgr.[                    ];

coreProp.Name = name;
coreProp.DisplayName = displayName;
coreProp.IsMultivalued = isMultivalued;
coreProp.Type = PropertyDataType.StringMultiValue;
coreProp.Length = 1024;
corePropMgr.Add(coreProp);
typPropMgr = prfPropMgr

.[                    ](ProfileType.User);

prfProp = typPropMgr.[                    ];

prfProp.IsVisibleOnViewer = true;
typPropMgr.Add(prfProp);
. . .
prftypePropMgr = prfPropMgr

.[                    ](prfType.Name);
```

Code segments:
- Create(coreProp)
- Create(corePropMgr)
- Create(true)
- Create(false)
- GetProfileSubtypeProperties
- GetProfileTypeProperties
- GetCoreProperties

Answer:

```
Answer Area

corePropMgr = prfPropMgr.GetCoreProperties();

coreProp = corePropMgr.[ Create(true) ];

coreProp.Name = name;
coreProp.DisplayName = displayName;
coreProp.IsMultivalued = isMultivalued;
coreProp.Type = PropertyDataType.StringMultiValue;
coreProp.Length = 1024;
corePropMgr.Add(coreProp);
typPropMgr = prfPropMgr

.[ GetProfileTypeProperties ](ProfileType.User);

prfProp = typPropMgr.[ Create(coreProp) ];

prfProp.IsVisibleOnViewer = true;
typPropMgr.Add(prfProp);
. . .
prftypePropMgr = prfPropMgr

.[ GetProfileSubtypeProperties ](prfType.Name);
```

Code segments:
- Create(coreProp)
- Create(corePropMgr)
- Create(true)
- Create(false)
- GetProfileSubtypeProperties
- GetProfileTypeProperties
- GetCoreProperties

Question No : 2 DRAG DROP - (Topic 1)

You need to add code to line MP57 to display the required properties for the user profile.

How should you complete the relevant code? (To answer, drag the appropriate code segments to the correct locations in the answer area. Each code segment 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.)

```
clientContext.Load(usrPrfProps);

clientContext.LoadQuery(usrPrfProps);

.GetUserProfilePropertyFor(usrPrfProps);

.GetUserProfilePropertiesFor(usrPrfProps);

string[] prfProps = new string[] { "DisplayName", "Title" };

string[] prfProps = new string[] { "PreferredName", "Title" };

var prfProps = new ArrayList() { "DisplayName", "Title" };
```

Answer Area

```
var peopleManager = new PeopleManager(clientContext);



var usrPrfProps = new UserProfilePropertiesForUser(clientContext,
account, prfProps);
var profilePropertyValues = peopleManager.



clientContext.ExecuteQuery();
```

Answer:

```
clientContext.Load(usrPrfProps);

clientContext.LoadQuery(usrPrfProps);

.GetUserProfilePropertyFor(usrPrfProps);

.GetUserProfilePropertiesFor(usrPrfProps);

string[] prfProps = new string[] { "DisplayName", "Title" };

string[] prfProps = new string[] { "PreferredName", "Title" };

var prfProps = new ArrayList() { "DisplayName", "Title" };
```

Answer Area

```
var peopleManager = new PeopleManager(clientContext);

  string[] prfProps = new string[] { "DisplayName", "Title" };

var usrPrfProps = new UserProfilePropertiesForUser(clientContext,
account, prfProps);
var profilePropertyValues = peopleManager.

  .GetUserProfilePropertiesFor(usrPrfProps);

clientContext.Load(usrPrfProps);

clientContext.ExecuteQuery();
```

Question No : 3 - (Topic 1)

You need to configure the external content type to search for research papers.

Which indexing connector should you use?

A. .NET Type Connector
B. WCF Service Connector
C. Custom Connector
D. SQL Server Connector

Answer: B

Question No : 4 - (Topic 1)

You need to generate document identifiers for each new document that is uploaded to the site.

What should you do?

A. Create a derived class that inherits from the abstract class named Microsoft.Office.DocumentManagement.DocumentId and then override all of the abstract methods.
B. Create a derived class that inherits from the abstract class named Microsoft.Office.DocumentManagement.DocumentIdProvider and then override all of the virtual members.
C. Create a derived class that inherits from the Microsoft.Office.DocumentManagement.DocumentIdProvider abstract class and then implement all abstract members.
D. Create a class to implement the Microsoft.Office.DocumentManagement.IDocumentId interface and then override all of the virtual members.

Answer: B

Question No : 5 DRAG DROP - (Topic 1)

You need to configure authentication for the external content type in the production environment.

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.)

Answer Area

Add the sqltrey user login to the Secure Store Service.

Configure permissions to allow the user that is logged in to have access to the Secure Store Service.

Stop the Business Data Connectivity service.

Create a Secure Store Service application as a target application.

Connect to the external data source by using the Impersonated Custom Identity and the target application name.

Connect to the external data source by using the Impersonated Windows Identity and the target application name.

Answer:

Question No : 6 DRAG DROP - (Topic 1)

You need to add code at line AJ05 to complete the implementation of the app.

How should you complete the relevant code? (To answer, drag the appropriate code segment to the correct location in the answer area. Each code segment 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.)