

Exam : 070-518

Title : Pro: Designing and

Developing Windows

Applications Using

Microsoft .NET Framework 4

Version: DEMO

1. You are designing a Windows Presentation Foundation (WPF) application by using Microsoft .NET Framework 4 and Microsoft Visual Studio 2010.

You plan to create a Customer object that contains an Orders property. The Orders property contains an array of Order objects.

When users browse Customer objects, they must be able to optionally view Order objects.

You need to design a data access strategy that retrieves data only when necessary.

Which strategy should you use?

A.lazy loading

B.eager loading

C.file streaming

D.pessimistic locking

Answer: A

2. You are designing the data access layer (DAL) for an application that uses Microsoft SQL Server 2008, Microsoft ADO.NET, and Microsoft Visual Studio 2010.

Conflicts are occurring in the SQL Server database due to concurrent updates.

You need to design a database locking strategy that meets the following requirements:

Resolves concurrent update conflicts without loss of data

Ensures that data conflicts can be resolved by users

Locks only the data necessary for updates

What should you do?

A.Use optimistic locking. Terminate the update when a DBConcurrency Exception occurs.

B.Use pessimistic locking. Terminate the update when a DBConcurrency Exception occurs.

C.Use pessimistic locking.Retry the failing update operation in the DBConcurrencyException exception handler until it succeeds.

D.Use optimistic locking.In the DBConcurrencyException exception handler, display the data of both original and updated records to the user.Allow the user to resolve the conflicts.

Answer: D

3. You are designing an application by using Microsoft .NET Framework 4, Microsoft Visual Studio 2010, and Microsoft SQL Server 2008.

The application will be used by a sales team to enter sales orders and update customer information.

You need to ensure that the application meets the following requirements:

Allows users to enter sales orders while their computers are disconnected from the network

Uploads sales orders to the server database when connected to the network

Compiles against the .NET Framework 4 client profile

What should you use?

A.XML files

B.WCF servicesA.Microsoft Sync Framework

C.the System.Web.Caching namespace classes

Answer: C

4. You are designing a sales and inventory tracking system by using Microsoft Visual Studio 2010 and Microsoft SQL Server 2008. The sales, inventory, and shipping tables will reside in different databases on

different database servers.

You need to ensure that the tables are updated simultaneously.

What should you do?

A.Use LINQ to SQL.

B.Use Distributed transactions.

C.Use Microsoft Sync Framework.

D.Use the ADO.NET Entity Framework.

Answer: B

5. You are developing a Windows application by using Microsoft .NET Framework 4, Microsoft Visual Studio 2010, and Microsoft SQL Server 2008. New features that require changes to be made to the database schema are added to the application every week.

You need to ensure that the changes made to the database schema do not require the application to be recompiled.

Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A.Modify the xml mapping file when the schema changes occur.

B.Modify the conceptual schema xml file when the schema changes occur.

C.Build a storage model and use it to access data from the business entities.

D.Build a conceptual model and use it to access data from the business entities.

Answer: A, D

6. You are designing a Windows application by using Microsoft .NET Framework 4 and Microsoft Visual Studio 2010.

You plan to implement control caching to improve the loading time of a control. It is not required to refresh the content of the control after the application loads. The application will be compiled by using the .NET 4 client profile.

You need to ensure that the following requirements are met:

The control is reusable in multiple forms.

Data in the control is cached when the application is loaded.

What should you do?

A.In the Load event of the application window, add code to load the control. Save the control to an instance variable.

B.In the Load event of the application window, add code to load the control. Save the control to the cache by using objects in the System. Web. Caching namespace.

C.In the constructor of the application window, add code to load the control. Save the control to a static variable.

D.In the constructor of the application window, add code to load the control. Save the control to the cache by using objects in the System. Web. Caching namespace.

Answer: C

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7. You are designing an application by using Microsoft .NET Framework 4 and Microsoft Visual Studio 2010.

The application is used mostly in a disconnected scenario. The application requires offline data from a Microsoft SQL Server 2008 database. When the application connects to the network, data will be modified

and synchronized.

You need to ensure that the application does not access the database server directly to synchronize data when online.

Which technology should you use?

A.WCF Data Service

B.Remote Data Access

C.ADO.NET Sync Services

D.SQL Server Merge Replication

Answer: C

8. You are designing a Windows Presentation Foundation (WPF) application by using Microsoft .NET Framework 4 and Microsoft Visual Studio 2010.

You plan to create an Author object that contains a Books property. The Books property contains a large array of Book objects.

When users browse through author data in the application, they must be able to view all information related to books written by that author without additional queries.

You need to design a data access strategy that meets the requirement.

Which strategy should you use?

A.lazy loading

B.eager loading

C.optimistic locking

D.pessimistic locking

Answer: B

9. You are developing an application by using Microsoft .NET Framework 4 and Microsoft Visual Studio 2010.

You plan to use Microsoft Sync Framework to synchronize the data stored in a local Microsoft SQL Server Compact Edition database with the data stored in a centralized SQL Server 2008 database.

Four columns are added to each table involved in the synchronization process to track changes to the database.

You add the following four columns to the database table.

Column Name	Data Type	
CreatedUser	Int	
UpdatedUser	Int	
CreatedTime	Datetime	
UpdatedTime	Datetime	

Users report that the synchronization process is not always successful.

You need to ensure that the application synchronizes data successfully.

What should you do?

A. • Replace the <u>UpdatedTime</u> and <u>CreatedTime</u> columns with the updated columns and data types as shown in the following table.

Original Column Name	Updated Column Name	Updated Data Type
CreatedTime	CreatedTimestamp	Rowversion
UpdatedTime	UpdatedTimestamp	Binary(8)

- Modify the synchronization anchor to use the min active rowversion() function.
- B. Replace the <u>UpdatedTime</u> and <u>CreatedTime</u> columns with the updated columns and data types as shown in the following table.

Original Column Name	Updated Column Name	Updated Data Type
CreatedCounter	CreatedTime	Int
UpdatedCounter	UpdatedTime	Int

- Modify the application to update the counter before and after synchronization.
- C. Replace the <u>UpdatedTime</u> and <u>CreatedTime</u> columns with the updated columns and data types as shown in the following table.

Original Column Name	Updated Column Name	Updated Data Type
CreatedTime	CreatedTimestamp	Rowversion
UpdatedTime	UpdatedTimestamp	Binary(8)

- Modify the synchronization anchor to use the getdate() function.
- D. Replace the <u>UpdatedTime</u> and <u>CreatedTime</u> columns with the updated columns and data types as shown in the following table.

Original Column Name	Updated Column Name	Updated Data Type
CreatedCounter	CreatedTime	Int
UpdatedCounter	UpdatedTime	Int

- Modify the synchronization anchor to obtain the maximum value of the <u>UpdatedCounter</u> or CreatedCounter columns across the database.
- Add one to the value obtained from the <u>UpdatedCounter</u> or <u>CreatedCounter</u> columns and use that as the new value of the <u>UpdatedCounter</u> or <u>CreatedCounter</u> column based on the operation performed.

A.Option A

B.Option B

C.Option C

D.Option D

Answer: A

10. You are designing a Windows application by using Microsoft .NET Framework 4, Microsoft Visual Studio 2010, and Microsoft SQL Server 2008.

You need to design a data access strategy that meets the following requirements:

Automatically tracks changes

Maps the database data model to the object model

Which data access technology should you use?

A.LINQ to SQL

B.LINQ to XML

C.ADO.NET DataSet

D.ADO.NET DataReader

Answer: A

11. You are developing a Windows application by using Microsoft .NET Framework 4, Microsoft Visual Studio 2010, and Microsoft SQL Server 2008.

The application will store data in a SQL Server database instance.

You plan to use the Code Generation technology to develop data entities.

You need to ensure that the following requirements are met:

When the application runs, a database must be created if it does not already exist.

When the database schema changes, data entities must be added dynamically.

Which data access technology should you use?

A.LINQ to SQL

B.ADO.NET Data View

C.ADO.NET Typed DataSets

D.ADO.NET Entity Framework

Answer: A

12. You are developing a Windows application by using Microsoft .NET Framework 4 and Microsoft Visual Studio 2010.

The application will consume a Windows Communication Foundation (WCF) service. The WCF service will provide data to the application. You plan to use the ADO.NET Entity Framework to create a data model that will be used by the application.

Another development team makes changes to the WCF service data contract.

You need to ensure that changes made to the WCF service data contract do not require the application to be recompiled.

What should you do?

A.Create a conceptual model and a storage model based on the existing version of the WCF service.

B.Create a storage model based on the business model. Use a class generated from the storage model for programming.

C.Create a storage model based on the schema of the existing WCF service. Update the mapping file when the new version of the WCF service is available.

D.Create a conceptual model based on the business model. Use a class generated from the conceptual model for programming. Update the mapping file when the new version of the WCF service is available.

Answer: D

13. You are designing an application by using Microsoft .NET Framework 4 and Microsoft Visual Studio 2010. You plan to design an instrumentation strategy for the application.

You need to ensure that the strategy meets the following requirements:

Captures detailed performance information.

Enables or disables diagnostic messages by using an application configuration option without requiring the application to restart.

What should you design?

A.A custom trace listener

B.A custom performance counter

C.An override to the Debug class

D.An override to the EventLog class

Answer: B

14. You are designing a complex and critical Windows desktop application by using Microsoft .NET Framework 4 and Microsoft Visual Studio 2010.

You plan to implement a logging strategy for the application.

You need to record all unexpected errors that occur in the application.

What should you do?

A.

- Subscribe to the unhandled exception event handler for the AppDomain object.
- Record relevant application-specific information to an external log.

B.

- Subscribe to the unhandled exception event handler for the application's dispatcher on the main application thread.
- Record relevant application-specific information to an external log.

C.

- Create a generic catch (Exception e) block in the Main method of the application.
- Record relevant application-specific information to a log in the Main method.

D.

- Create a global WIN 32 unhandled exception filter.
- Record relevant application-specific information to an external log from within the filter.

Answer: D

15. You are designing a Windows Presentation Foundation (WPF) application by using Microsoft .NET Framework 4 and Microsoft Visual Studio 2010.

During testing of the application, you identify several bottlenecks by using Windows Task Manager and Windows Performance Monitor.

You need to recommend a system test strategy that will meet the following requirements:

Identify major application workloads.

Identify the functions of the application that are most impacted.

Which testing strategy should you recommend?

A.Usability testing

B.Security testing

C.Stability testing

D.Scalability testing

Answer: D

16. You are designing a Windows application by using Microsoft .NET Framework 4.

Remote users have limited network connectivity. Users will not have write permissions to the local file system.

You plan to design the error logging strategy for the application.

You need to ensure that the application can collect error information. You also need to ensure that the errors can be analyzed from a centralized location.

What should you do?

A.Use a local log file.

B.Use the Microsoft Sync Framework.

C.Log the errors to a Web service.

D.Log the errors to the Windows System event log.

Answer: B

17. You are developing an application by using Microsoft .NET Framework 4.

The application will be used by all employees of your company, Local file stores on the computers are secure and inaccessible remotely.

You need to design a remote monitoring strategy to monitor the usage time of the application by each user.

What should you do?

A.Create a TraceLog object and the Trace object by using the System. Diagnostics element to trace startup, shutdown, and user idle time events throughout the application.

B.Create a TraceLog object by using the System. Diagnostics element in the application configuration file. Add the TraceSource element for startup, shutdown, and user idle time events.

C.Use the System.Management.Instrumentation namespace to publish startup, shutdown, and user idle time events of the application.Publish the events to Microsoft Operations Manager.

D.Use the System.Management.Instrumentation namespace to issue event queries against methods that pass ProgressEvent and StoppedEvent arguments.Publish the events to the Event Log.

Answer: C

18. You are designing a Windows Presentation Foundation (WPF) application by using Microsoft .NET Framework 4 and Microsoft Visual Studio 2010.

You need to ensure that the following requirements are met:

All UI elements are labeled.

All property values are exposed.

Keyboard navigation contains tab stops for all controls.

The application functions on high contrast displays.

Which testing strategy should you recommend?

A.Stress testing

B.Stability testing

C.Usability testing

D.Accessibility testing

Answer: D

19. You are developing a Windows application by using Microsoft .NET Framework 4.

You plan to design a diagnostic logging strategy that will be used in a production environment.

You need to ensure that the strategy meets the following requirements:

Enables or disables diagnostic messages by using an application configuration option.

Changes the level of detail in the diagnostic messages without recompiling the application.

Which class should you use?

A.Trace

B.Debug

C.Contract

D.EventLog

Answer: A

20. You are developing a Windows Presentation Foundation (WPF) application by using Microsoft .NET Framework 4.

You need to recommend a testing strategy to identify the additional hardware resources that are necessary to support future projected growth.

Which testing strategy should you recommend?

A.Load testing

B.Stress testing

C.Capacity testing

D.Integration testing

Answer: C