

# Exam : 70-565

Title: Pro: Designing and<br/>Developing Enterprise<br/>Applications Using the<br/>Microsoft .NET Framework<br/>3.5

## Version : Demo

1. How many years of experience do you have in developing enterprise applications by using the Microsoft .NET Framework 3.5?

- A. I have not done this yet.
- B. Less than 6 months
- C. 6 months- 1 year
- D. 1- 2 years
- E. 2-3 years
- F. More than 3 years

## Answer: A

2. How many years of experience do you have in developing enterprise applications by using any version of the Microsoft .NET Framework?

- A. I have not done this yet.
- B. Less than 6 months
- C. 6 months- 1 year
- D. 1-2 years
- E. 2-3 years
- F. More than 3 years

## Answer: A

3. Rate your level of proficiency in envisioning and designing an application, including analyzing and refining the logical, physical, and database designs of the application.

A. I am considered an expert on this. I have successfully done this multiple times without assistance or error. I train or supervise others on this activity. Others come to me when they have questions or need assistance with this.

B. I have successfully done this without assistance and with few errors, but I do not train or supervise others on this activity.

C. I am proficient at this. I have successfully done this on my own, but I occasionally require assistance for some types of problems encountered when doing this and/or occasionally make minor errors.

D. I have successfully done this with the assistance of others or specific instructions.

E. I am a novice. I have not yet done this or am learning.

## Answer: A

4. Rate your level of proficiency in designing and developing an application framework, including choosing an appropriate implementation approach for the application design logic, defining the interaction between framework components, and defining validation and event logging strategies.

A. I am considered an expert on this. I have successfully done this multiple times without assistance or

error. I train or supervise others on this activity. Others come to me when they have questions or need assistance with this.

B. I have successfully done this without assistance and with few errors, but I do not train or supervise others on this activity.

C. I am proficient at this. I have successfully done this on my own, but I occasionally require assistance for some types of problems encountered when doing this and/or occasionally make minor errors.

D. I have successfully done this with the assistance of others or specific instructions.

E. I am a novice. I have not yet done this or am learning.

## Answer: A

5. Rate your level of proficiency in designing application components, including creating the high-level design of a component, defining the internal architecture of a component, and defining the data handling for a component.

A. I am considered an expert on this. I have successfully done this multiple times without assistance or error. I train or supervise others on this activity. Others come to me when they have questions or need assistance with this.

B. I have successfully done this without assistance and with few errors, but I do not train or supervise others on this activity.

C. I am proficient at this. I have successfully done this on my own, but I occasionally require assistance for some types of problems encountered when doing this and/or occasionally make minor errors.

D. I have successfully done this with the assistance of others or specific instructions.

E. I am a novice. I have not yet done this or am learning.

## Answer: A

6. Rate your level of proficiency in stabilizing and testing an application, including defining a functional test strategy, performing integration testing, and performing a code review.

A. I am considered an expert on this. I have successfully done this multiple times without assistance or error. I train or supervise others on this activity. Others come to me when they have questions or need assistance with this.

B. I have successfully done this without assistance and with few errors, but I do not train or supervise others on this activity.

C. I am proficient at this. I have successfully done this on my own, but I occasionally require assistance for some types of problems encountered when doing this and/or occasionally make minor errors.

D. I have successfully done this with the assistance of others or specific instructions.

E. I am a novice. I have not yet done this or am learning.

Answer: A

7. Rate your level of proficiency in migrating, deploying, and maintaining an application, including creating a deployment plan, and analyzing the configuration of the production environment, performance monitoring data, and logs.

A. I am considered an expert on this. I have successfully done this multiple times without assistance or error. I train or supervise others on this activity. Others come to me when they have questions or need assistance with this.

B. I have successfully done this without assistance and with few errors, but I do not train or supervise others on this activity.

C. I am proficient at this. I have successfully done this on my own, but I occasionally require assistance for some types of problems encountered when doing this and/or occasionally make minor errors.

D. I have successfully done this with the assistance of others or specific instructions.

E. I am a novice. I have not yet done this or am learning.

## Answer: A

8. Which of the following technologies do you use regularly? Choose all that apply.

- A. Microsoft ASP.NET
- B. Windows Forms
- C. Windows Presentation Foundation (WPF)
- D. Microsoft ADO.NET
- E. Windows Communication Foundation (WCF)
- F. Distributed technologies in .NET 3.5

## Answer: A

9. You create an application by using Microsoft Visual Studio .NET 2008 and the .NET Framework 3.5.

The application includes a component. The component will be referenced by the .NET and COM applications.

The component contains the following code segment.

public class Employee

```
{
```

```
public Employee(string name)
```

{ }

}

The .NET and COM applications must perform the following tasks:

Create objects of the Employee type.

use these objects to access the employee details.

You need to ensure that the .NET and COM applications can consume the managed component.

What should you do?

A. Change the Employee class to a generic class.

B. Change the constructor to a no-argument constructor.

C. Set the access modifier of the class to internal.

D. Set the access modifier of the constructor to protected.

## Answer: B

10. You create an application by using Microsoft Visual Studio .NET 2008 and the .NET Framework 3.5.

The application includes a component. The component will be referenced by the .NET and COM applications.

The component contains the following code segment.

Public Class Employee

Public Sub New(ByVal name As String)

End Sub

End Class

The .NET and COM applications must perform the following tasks:

Create objects of the Employee type.

use these objects to access the employee details.

You need to ensure that the .NET and COM applications can consume the managed component.

What should you do?

A. Change the Employee class to a generic class.

B. Change the constructor to a no-argument constructor.

C. Set the access modifier of the class to Friend.

D. Set the access modifier of the constructor to Protected.

## Answer: B

11. You create a Windows Forms application by using Microsoft Visual Studio .NET 2008 and the .NET Framework 3.5.

The application contains the following code segment.

public DataSet GetProductByID(string ProductID)

```
{
```

DataSet ds = new DataSet("ProductList");

string SqlSelectCommand = "Select \* FROM PRODUCTS WHERE

PRODUCTID=" + ProductID;

try

```
{
    SqlDataAdapter da = new SqlDataAdapter();
    SqlConnection cn = new SqlConnection(GetConnectionString());
    SqlCommand cmd = new SqlCommand(SqlSelectCommand);
    cmd.CommandType = CommandType.Text;
    cn.Open();
    da.Fill(ds);
    cn.Close();
}
catch (Exception ex)
{
    string msg = ex.Message.ToString();
    //Perform Exception Handling Here
}
return ds;
```

```
}
```

You need to ensure that the code segment is as secure as possible.

What should you do?

A. Ensure that the connection string is encrypted.

```
B. Use a StringBuilder class to construct the SqlSelectCommand string.
```

C. Add a parameter to the cmd object and populate the object by using the ProductID string.

D. Replace the SELECT \* statement in the SqlSelectCommand string with the SELECT <column list> statement.

## Answer: C

12. You create a Windows Forms application by using Microsoft Visual Studio .NET 2008 and the .NET Framework 3.5.

The application contains the following code segment.

Public Function GetProductByID(ByVal ProductID As String) As DataSet

Dim ds As DataSet = New DataSet("ProductList")

Dim SqlSelectCommand As String = "Select \* FROM PRODUCTS WHERE

PRODUCTID=" + ProductID

Try

Dim da As SqlDataAdapter = New SqlDataAdapter()

Dim cn As SqlConnection = New

SqlConnection(GetConnectionString())

Dim cmd As SqlCommand = New SqlCommand(SqlSelectCommand)

cmd.CommandType = CommandType.Text

cn.Open()

da.Fill(ds)

cn.Close()

Catch ex As Exception

Dim msg As String = ex.Message.ToString()

'Perform Exception Handling Here

End Try

Return ds

End Function

You need to ensure that the code segment is as secure as possible.

What should you do?

A. Ensure that the connection string is encrypted.

B. Use a StringBuilder class to construct the SqlSelectCommand string.

C. Add a parameter to the cmd object and populate the object by using the ProductID string.

```
D. Replace the SELECT * statement in the SqlSelectCommand string with the SELECT <column list> statement.
```

## Answer: C

13. You create applications by using Microsoft Visual Studio .NET 2008 and the .NET Framework 3.5.

You deploy a new Windows Forms application in a test environment. During the test process, an error message that includes an incomplete stack trace is reported.

You review the following code segment that has caused the error.

public int AddNewMission(DateTime date, string mission, string missionLink)

```
{
```

try

```
{
```

```
DALCode pgr = new DALCode("cnWeb");
```

int retcode = pgr.AddNewMission(date, mission, missionLink);

```
return retcode;
```

```
}
```

catch (Exception ex)

```
{
```

```
throw new Exception(ex.Message);
}
finally
{
    pgr.Dispose();
}
```

```
}
```

You need to modify the code segment to display the entire stack trace.

What should you do?

A. Remove the CATCH block.

B. Remove the FINALLY block.

C. Add a Using block to the TRY block.

D. Replace the THROW statement in the CATCH block with throw(ex).

## Answer: A

14. You create applications by using Microsoft Visual Studio .NET 2008 and the .NET Framework 3.5.

You deploy a new Windows Forms application in a test environment. During the test process, an error message that includes an incomplete stack trace is reported.

You review the following code segment that has caused the error.

Public Function AddNewMission(ByVal missiondate As DateTime, \_

ByVal mission As String, ByVal missionLink As String) As Integer

```
Dim pgr As DALCode = New DALCode("cnWeb")
```

Try

Dim retcode As Int16 = \_

pgr.AddNewMission(missiondate, mission, missionLink)

Return retcode

Catch ex As Exception

Throw New Exception(ex.Message.ToString())

Finally

pgr.Dispose()

End Try

End Function

You need to modify the code segment to display the entire stack trace.

What should you do?

A. Remove the CATCH block.

- B. Remove the FINALLY block.
- C. Add a Using block to the TRY block.
- D. Replace the THROW statement in the CATCH block with Throw (ex).

## Answer: A

15. You create an application by using Microsoft Visual Studio .NET 2008 and the .NET Framework 3.5.

The application has a class that contains a method named NewEvent. The NewEvent method contains the following code segment.

```
using (SqlConnection cn = new SqlConnection(connString))
```

```
{
```

```
SqlCommand cmd = new SqlCommand();
```

cmd.Connection = cn;

cmd.CommandText = "prcEvent";

```
cmd.Parameters.Add("@Date", SqlDbType.DateTime, 4);
```

cmd.Parameters.Add("@Desc", SqIDbType.VarChar, 8000);

```
cmd.Parameters.Add("@Link", SqlDbType.VarChar, 2048);
```

cmd.Parameters["@Date"].Value = date;

cmd.Parameters["@Desc"].Value = eventText;

cmd.Parameters["@Link"].Value = eventLink;

```
cn.Open();
```

```
retcode = cmd.ExecuteNonQuery().ToString();
```

```
}
```

During the test process, a user executes the NewEvent method. The method fails and returns the following error message:

"A stored procedure named prcEvent requires a parameter named @Date."

You need to resolve the error.

What should you do?

A. Set the CommandText property of the cmd object to dbo.prcEvent.

B. Set the CommandType property of the cmd object to CommandType.TableDirect.

C. Set the CommandType property of the cmd object to CommandType.StoredProcedure.

D. Replace the ExecuteNonQuery method of the cmd object with the ExecuteScalar method.

## Answer: C

16. You create an application by using Microsoft Visual Studio .NET 2008 and the .NET Framework 3.5.

The application has a class that contains a method named NewEvent. The NewEvent method contains the following code segment.

```
Using cn As SqlConnection = New SqlConnection(connString)
```

```
Dim cmd As SqlCommand = New SqlCommand()
```

```
cmd.Connection = cn
```

cmd.CommandText = "prcEvent"

cmd.Parameters.Add("@Date", SqlDbType.DateTime, 4)

cmd.Parameters.Add("@Desc", SqlDbType.VarChar, 8000)

cmd.Parameters.Add("@Link", SqlDbType.VarChar, 2048)

cmd.Parameters("@Date").Value = dateValue

cmd.Parameters("@Desc").Value = eventText

cmd.Parameters("@Link").Value = eventLink

cn.Open()

```
retcode = cmd.ExecuteNonQuery()
```

## End Using

During the test process, a user executes the NewEvent method. The method fails and returns the following error message:

"A stored procedure named prcEvent requires a parameter named @Date."

You need to resolve the error.

What should you do?

A. Set the CommandText property of the cmd object to dbo.prcEvent.

B. Set the CommandType property of the cmd object to CommandType.TableDirect.

C. Set the CommandType property of the cmd object to CommandType.StoredProcedure.

D. Replace the ExecuteNonQuery method of the cmd object with the ExecuteScalar method.

## Answer: C

17. You create a Windows Communication Foundation (WCF) application by using Microsoft Visual Studio 2008 and the .NET Framework 3.5.

You create a WCF service by using the following code segment. (Line numbers are included for reference only.)

01 [ServiceContract]

02 public interface IContosoService

03 {

04 [OperationContract]

05

06 void ProcessTransaction();

07 }

08
09 public class ContosoService : IContosoService
10 {
11 public void ProcessTransaction() {
12 try {
13 BusinessComponent.ProcessTransaction();
14 }
15 catch (ApplicationException appEx) {
16
17 }
18 }
19 }
The BusinessComponent.ProcessTransaction method will only throw exceptions from the
ApplicationException type. You plan to debug the WCF service.

You need to ensure that the WCF service meets the following requirements:

Detailed exception information is provided to the client application.

Subsequent calls can be issued to the service by using the same proxy intance after an exception is caught in the client application.

What should you do?

A. Add the following code segment at line 08.

[ServiceBehavior(IncludeExceptionDetailInFaults=true)]

Add the following code segment at line 16.

throw appEx;

B. Add the following code segment at line 05.

[FaultContract(typeof(ApplicationException))]

Add the following code segment at line 16.

throw appEx;

C. Add the following code segment at line 08.

[ServiceBehavior(IncludeExceptionDetailInFaults=true)]

Add the following code segment at line 16.

throw new FaultException<ApplicationException>(appEx);

D. Add the following code segment at line 05.

[FaultContract(typeof(ApplicationException))]

Add the following code segment at line 16.

throw new FaultException<ApplicationException>(appEx);

## Answer: D

18. You create a Windows Communication Foundation (WCF) application by using Microsoft Visual Studio 2008 and the .NET Framework 3.5.

You create a WCF service by using the following code segment. (Line numbers are included for reference only.)

01 <ServiceContract()> \_

02 Public Interface IContosoService

- 03
- 04 <OperationContract()> \_

```
05 Sub ProcessTransaction()
```

06

```
07 End Interface
```

08

09 Public Class ContosoService

```
10 Implements IContosoService
```

11

12 Public Sub ProcessTransaction() \_

Implements IContosoService.ProcessTransaction

- 13 Try
- 14 BusinessComponent.ProcessTransaction()
- 15 Catch appEx As ApplicationException

16

17 End Try

```
18 End Sub
```

19 End Class

The BusinessComponent.ProcessTransaction method will only throw exceptions from the ApplicationException type. You plan to debug the WCF service.

You need to ensure that the WCF service meets the following requirements:

Provides detailed exception information to the client application.

Subsequent calls can be issued to the service by using the same proxy intance after an exception is caught in the client application.

What should you do?

A. Add the following code segment at line 08.

<ServiceBehavior(IncludeExceptionDetailInFaults:=True)> Add the following code segment at line 16. Throw appEx B. Add the following code segment at line 06. <FaultContract(GetType(ApplicationException))> Add the following code segment at line 16. Throw appEx C. Add the following code segment at line 08. <ServiceBehavior(IncludeExceptionDetailInFaults:=True)> Add the following code segment at line 16. Throw New FaultException(Of ApplicationException)(appEx)

D. Add the following code segment at line 06.

<FaultContract(GetType(ApplicationException))>

Add the following code segment at line 16.

Throw New FaultException(Of ApplicationException)(appEx)

## Answer: D

19. You create an application by using Microsoft Visual Studio .NET 2008 and the .NET Framework 3.5. The application design specifies the following components:

A user interface implemented as an ASP.NET 3.5 Web application

A Microsoft SQL Server 2005 database to store business data

A Windows Communication Foundation (WCF) service that authenticates users that have their credentials stored in the SQL Server database

A business data service to transfer data between the user interface and the SQL Server database

In future releases, the application must also be able to authenticate business partners who use non-Microsoft directory servers to store user credentials.

You need to ensure that the application design meets the extensibility requirements.

What should you do?

A. Implement the business data service as a WCF service.

B. Host the Web application on multiple load-balanced Web servers.

C. Add an abstraction layer between the user interface and the authentication service.

D. Implement database objects that store the corporate user credentials in the same SQL Server database as the business data.

## Answer: C

20. You create an application by using Microsoft Visual Studio .NET 2008 and the .NET Framework 3.5.

The application design specifies the following components:

A user interface implemented as an ASP.NET 3.5 Web application

A Microsoft SQL Server 2005 database to store business data

A Windows Communication Foundation (WCF) service that authenticates users that have their credentials stored in the SQL Server database

A business data service to transfer data between the user interface and the SQL Server database

In future releases, the application must also be able to authenticate business partners who use non-Microsoft directory servers to store user credentials.

You need to ensure that the application design meets the extensibility requirements.

What should you do?

A. Implement the business data service as a WCF service.

B. Host the Web application on multiple load-balanced Web servers.

C. Add an abstraction layer between the user interface and the authentication service.

D. Implement database objects that store the corporate user credentials in the same SQL Server database as the business data.

## Answer: C

21. You create an application by using Microsoft Visual Studio .NET 2008 and the .NET Framework 3.5. The ASP.NET application connects to a shared Microsoft SQL Server 2008 database instance.

The application requires certain changes in the relationships represented in the data. However, any changes to the database schema can break existing applications that share the database instance.

You need to recommend a strategy that allows the application to make the required relationship changes without affecting the underlying database schema. You also need to ensure that the strategy uses the minimum amount of development effort.

Which strategy should you recommend?

A. Generate a model by using LINQ to SQL. Make the relationship changes to the model.

B. Generate an ADO.NET Entity Framework model. Make the relationship changes in the model.

C. Add an HTTP endpoint to SQL Server 2008 database to retrieve the data from the database in tabular format.

D. Create a DataSet object and add a DataTable object for each table in the database. Create a DataRelation object for each relationship required for the application.

## Answer: B

22. You create an application by using Microsoft Visual Studio .NET 2008 and the .NET Framework 3.5.

The ASP.NET application connects to a shared Microsoft SQL Server 2008 database instance.

The application requires certain changes in the relationships represented in the data. However, any

changes to the database schema can break existing applications that share the database instance.

You need to recommend a strategy that allows the application to make the required relationship changes without affecting the underlying database schema. You also need to ensure that the strategy uses the minimum amount of development effort.

Which strategy should you recommend?

A. Generate a model by using LINQ to SQL. Make the relationship changes to the model.

B. Generate an ADO.NET Entity Framework model. Make the relationship changes in the model.

C. Add an HTTP endpoint to SQL Server 2008 database to retrieve the data from the database in tabular format.

D. Create a DataSet object and add a DataTable object for each table in the database. Create a DataRelation object for each relationship required for the application.

## Answer: B

23. You create an application by using Microsoft Visual Studio .NET 2008 and the .NET Framework 3.5.

The application includes multiple components. The components communicate by passing messages to each other. You are planning to update the application to meet new business requirements.

You need to document the application logic. You also need to ensure that the documentation captures the details of the component interaction.

What should you do?

- A. Use a class diagram.
- B. Use a Use case diagram.
- C. Use a sequence diagram.
- D. Use a component diagram.

## Answer: C

24. You create an application by using Microsoft Visual Studio .NET 2008 and the .NET Framework 3.5.

The application includes multiple components. The components communicate by passing messages to each other. You are planning to update the application to meet new business requirements.

You need to document the application logic. You also need to ensure that the documentation captures the details of the component interaction.

What should you do?

- A. Use a class diagram.
- B. Use a Use case diagram.
- C. Use a sequence diagram.
- D. Use a component diagram.

## Answer: C

25. You create an application by using Microsoft Visual Studio .NET 2008 and the .NET Framework 3.5.

The application will be used on personal computers and mobile-based devices.

The current application design is composed of the following three layers:

User interface layer

**Business layer** 

Data access layer

You need to ensure that the application offers a custom experience to the end user based on the type of device used. You also need to ensure that code duplication is avoided.

What should you do?

A. Implement different business layers for mobile-based devices and personal computers. Implement a single service layer to expose the business layer to the user interface.

B. Implement different data access layers for mobile-based devices and personal computers. Implement a single business layer to expose business objects to the user interface.

C. Implement different user interface layers for mobile-based devices and personal computers. Implement a single user interface process layer to expose business objects to the user interface.

D. Implement different user interface process layers for mobile-based devices and personal computers.

Implement a single user interface to expose data by using rules from the user interface process layer.

## Answer: C

26. You create an application by using Microsoft Visual Studio .NET 2008 and the .NET Framework 3.5. The application will be used on personal computers and mobile-based devices.

The current application design is composed of the following three layers:

User interface layer

**Business layer** 

Data access layer

You need to ensure that the application offers a custom experience to the end user based on the type of device used. You also need to ensure that code duplication is avoided.

What should you do?

A. Implement different business layers for mobile-based devices and personal computers. Implement a single service layer to expose the business layer to the user interface.

B. Implement different data access layers for mobile-based devices and personal computers. Implement a single business layer to expose business objects to the user interface.

C. Implement different user interface layers for mobile-based devices and personal computers. Implement a single user interface process layer to expose business objects to the user interface.

D. Implement different user interface process layers for mobile-based devices and personal computers.

Implement a single user interface to expose data by using rules from the user interface process layer.

#### Answer: C

27. You create an application by using Microsoft Visual Studio .NET 2008 and the .NET Framework 3.5. Users access the application by using Windows-based client applications or Web-based client applications. All client applications share common business logic to handle transaction processing requests.

You need to ensure that the application is easy to maintain.

## What should you do?

A. Create a single component and host the component on each client application.

B. Create a single component and host the component on a separate application tier.

C. Create separate components and host the components on each application tier.

D. Create separate components and host the components on each client application.

## Answer: B

28. You create an application by using Microsoft Visual Studio .NET 2008 and the .NET Framework 3.5. Users access the application by using Windows-based client applications or Web-based client applications. All client applications share common business logic to handle transaction processing requests.

You need to ensure that the application is easy to maintain.

What should you do?

A. Create a single component and host the component on each client application.

- B. Create a single component and host the component on a separate application tier.
- C. Create separate components and host the components on each application tier.

D. Create separate components and host the components on each client application.

## Answer: B

29. You create an ASP.NET application by using Microsoft Visual Studio .NET 2008 and the .NET Framework 3.5.

The application uses the Session object to store data. The application is currently deployed to a single server.

You need to ensure that the application is available in the event of failure of any single server.

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

A. Host the application in a Web farm environment.

- B. Host the application in a Web garden environment.
- C. Use the SQLServer mode to store the session state.
- D. Use the StateServer mode to store the session state.

E. Use the Application object instead of the Session object to cache data.

Answer: AC