

QUESTION 1

You use Visual Studio .NET to develop an application for users the intranet of your company Certkiller. All client computers use Internet Explorer as their Web browser. You plan to create a setup package to distribute your application. The setup package must fulfill the following requirements:

- It is placed in a network folder that is accessible to users.
- It is accessible through a link on your company's intranet.
- It includes an uninstaller for the application.

Which type of project should you create?

- A. CAB project.
- B. merge module project.
- C. setup project.
- D. Web setup project.

Answer: C

Explanation:

You should use the network installation (type of setup project).

Note:

Setup projects allow you to create installers in order to distribute an application. The resulting Windows Installer (.msi) file contains the application, any dependent files, information about the application such as registry entries, and instructions for installation.

Reference:

Visual Studio, Deployment of a Web Setup Project

Visual Studio, CAB File Projects

Visual Studio, Adding Merge Modules to a Deployment Project

Visual Studio, Setup Projects

Incorrect Answers

A: CAB projects allow you to create a .cab file to package ActiveX controls, not applications however, that can be downloaded from a Web server to a Web browser.

B: You don't install merge module projects with Internet Explorer. Note: Merge modules (.msm files) allow you to share components between multiple deployment projects.

D: Purpose of the Web setup project is for installing Web applications (ASP.NET applications). In case of Web applications, setup package don't have to be accessible to users in network folder (you install Web application on a Web server, and users use it without further installation).

QUESTION 2

You develop a Windows-based application by using Visual Studio .NET. The application included numerous method calls at startup. After optimizing your application code, you test the application on a variety of client computers. However, the startup time is too slow. You must ensure that your application starts as quickly as possible the first time it runs. What should you do?

- A. Precompile your application by using the Native Image Generator (Ngen.exe). Install the precompiled application on the client computers.
- B. Install your application on the client computers. Precompile your application by using the Native Image Generator (Ngen.exe).
- C. Precompile your application by using the JIT compiler. Install the precompiled application on the client computers.

D. Install your application on the client computers. Precompile your application by using the JIT compiler.

Answer: B

Explanation:

The Native Image Generator creates a native image from a managed assembly and installs it into the native image cache on the local computer. Running Ngen.exe on an assembly allows the assembly to load and execute faster, because it restores code and data structures from the native image cache rather than generating them dynamically. The native image contains processor-specific machine code and in this scenario a variety of client computers are used. We must therefore use the Ngen.exe utility at the client computers after the installation, not at the Development computer.. Reference:

.NET Framework Tools, Native Image Generator (Ngen.exe)

.NET Framework Developer's Guide, Compiling MSIL to Native Code

Incorrect Answers

A: The Native Image produced by Ngen.exe is machine-specific and in this scenario a variety of client computers are used. We cannot use the a single Native Image from once computer on all the other computers.

C, D: JIT (just-in-time) compilation occurs at run-time, and cannot be precompiled.

Note:

When you compile a .NET application, it is not compiled to binary machine code; rather, it is converted to IL, which is a low-level set of instructions understood by the common language run time. When execution starts, the first bit of code that needs to be executed is loaded into memory and compiled into native binary code from IL by the common language run time's Just-In-Time (JIT) compiler.

QUESTION 3

You use Visual Studio .NET to create an application that will be distributed to employees within your company Certkiller Inc.. You create and deploy a distribution package to test a computer running Windows 2000 Professional. Later you discover that your name is listed as the support contact for your application by the Add/Remove Programs option of Control Panel. You need to change the support contact to the name of your Help desk administrator.

Which property of the setup project should you change?

A. Author

B. Comments

C. Manufacturer

D. Support Phone

Answer: A

Explanation:

The Author property specifies the name of the author of an application or component. Once the application is installed, the property is also displayed in the Contact field of the Support Info dialog box.

Reference:

Visual Studio, Deployment Properties

Visual Studio, Author Property

Visual Studio, Manufacturer Property

Incorrect Answers

B: There is no Deployment property called comments.

C: The Manufacturer property specifies the name of the manufacturer of an application or component, usually the name of the company that developed it. Once the application is installed, the Manufacturer property is

displayed in the Publisher field of the Support Info dialog box.
D: We are not interested in supplying a telephone number-

QUESTION 4

You use Visual Studio .NET to create an assembly, called Certkiller Assembly, that will be used by other applications, including a standard COM client application. You must deploy your assembly on the COM application to a client computer. You must ensure that the COM application can instantiate components within the assembly as COM components. What should you do?

- A. Create a strong name of the assembly by using the Strong Name tool (Sn.exe).
- B. Generate a registry file for the assembly by using the Assembly Registration tool (Regasm.exe) Register the file on the client computer.
- C. Generate a type library for the assembly by using the Type Library Importer (Tlbimp.exe). Register the file on the client computer.
- D. Deploy the assembly to the global assembly cache on the client computer. Add a reference to the assembly in the COM client application.

Answer: B

Explanation:

The Assembly Registration tool reads the metadata within an assembly and adds the necessary entries to the registry, which allows COM clients to create .NET Framework classes transparently. Once a class is registered, any COM client can use it as though the class were a COM class.

Reference:

.NET Framework Tools, Assembly Registration Tool (Regasm.exe) .NET Framework Tools, Strong Name Tool (Sn.exe)

.NET Framework Tools, Type Library Importer (Tlbimp.exe)

Incorrect Answers

- A: The Strong Name tool helps sign assemblies with strong names.
 - C: The Type Library Importer, tlbimp.exe, converts the type definitions found within a COM type library into equivalent definitions in a common language runtime assembly. It would not be useful in this scenario however.
 - D: This would not allow the COM application to use the class.
-

QUESTION 5

You develop a Windows-based application called Certkiller Security by using Visual Studio .NET and Microsoft SQL Server. The application will perform numerous Assert, Deny, and Permit Only security operations while it is executing. You must ensure that the application is optimized for fast run-time execution. What should you do?

- A. Perform declarative security checks.
- B. Perform imperative security checks.
- C. Perform all security checks by using SQL Server security.
- D. Implement a custom security class that retrieves security information from the SQL Server database.

Answer: A

Explanation:

Declarative security checks in the application would be the fastest solution.

Reference:

.NET Framework Developer's Guide, Performing Declarative Security Checks [Visual Basic]

.NET Framework Developer's Guide , Adding Declarative Security Support [Visual Basic]

Visual Basic and Visual C# Concepts, Adding Imperative Security Checks to Components

Incorrect Answers

A: Imperative security checks allow you to protect specific blocks of code by requiring appropriate permissions. It cannot be used for Assert, Deny, and Permit Only security operations.

C, D: SQL Server security would be more scalable, but less optimized.

QUESTION 6

Another developer in your company uses Visual Studio .NET to create a component named CertK Component. You deploy CertK Component to a server. When you execute CertK Component, you receive the following error message:

"System.Security.Policy.PolicyException: Failed to acquire required permissions."

As quickly as possible, you need to discover which permissions are required by CertK Component. What should you do?

A. Request the source code from the developer who created My Component. Examine the source code to find the required permissions.

B. Run the Microsoft CLR Debugger (DbgCLR.exe) on the server to view the permissions requested by the application at run time.

C. Run the Runtime Debugger (Cordbg.exe) on the server to view the permissions requested by the application at run time.

D. Run the Permissions View tool (Permview.exe) on the server to view the permissions required by CertK Component.

E. Run the MSIL Disassembler (Ildasm.exe) on the server to view permissions requested by CertK Component that were denied.

Answer: D

Explanation:

Developers can use Permview.exe to verify that they have applied permission requests correctly to their code. Additionally, users can run Permview.exe to determine the permissions an assembly requires to execute.

Reference:

.NET Framework Tools, Permissions View Tool (Permview.exe)

QUESTION 7

You use Visual .NET to develop a Windows-based application whose project name is CertkillerMgmt. You create an application configuration file that will be installed on the client computer along with Certkiller Mgmt. You must ensure that the settings in the application configuration file are applied when CertkillerMgmt is executed. What should you do?

A. Name the configuration file CertkillerMgmt.exe.confing and copy it to the Windows\System32 folder.

B. Name the configuration file CertkillerMgmt.config and copy it to the Windows\System32 folder.

C. Name the configuration file CertkillerMgmt.exe.config and copy it to the application folder.

D. Name the configuration file CertkillerMgmt.config and copy it to the application folder.

E. Name the configuration file CertkillerMgmt.exe.config and copy it to the global assembly cache.

Answer: C

Explanation:

The configuration file for an application hosted by the executable host is in the same directory as the application. The name of the configuration file is the name of the application with a .config extension. In this scenario the configuration file should be named Certkiller Mgmt.exe.config and be placed in the application folder.

Reference:

.NET Framework Developer's Guide, Application Configuration Files

QUESTION 8

You use Visual Studio .NET to develop a Windows-based application named Advocate Resource Assistant (ARA). ARA contains a class named Client. The client class is defined by the following code segment:

```
Namespace Fabrikam.Buslayer
```

```
Public Class Client
```

```
Public Function GetPhone (clientID As Integer) As String
```

```
'More code goes here.
```

```
End Function
```

```
'Other functions go here.
```

```
End Class
```

```
End Namespace
```

The Client class is invoked from ARA by using the following code segment:

```
Public Class Client Form
```

```
Inherits System. Windows.Forms.Form
```

```
Private Sub SetPhoneNumber(ByVal PostalCode As String)
```

```
Dim client as New Client()
```

```
TextBox1.Text = client. GetPhone (postalCode)
```

```
End Sub
```

```
End Class
```

When you try to build your project, you receive the following error message: "Type 'Client' is not defined."

What are two possible ways to correct this problem? (Each correct answer presents a complete solution. Choose two.)

A. Fully qualify the Client class with the Fabrikam. Bus Layer namespace.

B. Fully qualify the Client class with ARA namespace.

C. Import the Fabrikam. Bus Layer namespace in the Client Form class.

D. Inherit the Fabrikam. Bus Layer namespace in the Client Form class.

E. Declare the client object variable by using the With Events keyword.

F. Declare the client object variable by using the Implements keyword.

Answer: A, C

Explanation:

A: We could use a fully qualified name; Fabrikam.Buslayer.Client

C: We could import the Fabrikam.BusLayer namespace by creating an alias: Imports client = Fabrikam.Buslayer.Client

Reference:

Visual Basic Language Concepts, Namespaces

QUESTION 9

You develop a Windows-based application. Its users will view and edit employee attendance data. The application uses a DataSet object named customDataSet to maintain the data while users are working with it. After a user edits data, business rule validation must be performed by a middle-tier component named myComponent. You must ensure that your application sends only edited data rows from customDataSet to myComponent. Which code segment should you use?

- A. Dim changeDataSet As New DataSet If customDataSet.HasChanges _ Then
myComponent.Validate(changeDataSet)
- B. Dim changeDataSet As New DataSet If customDataSet.HasChanges _ Then
myComponent.Validate(customDataSet)
- C. Dim changeDataSet AS DataSet = customDataSet.GetChanges() myComponent.Validate(changeDataSet)
- D. Dim changeDataSet As DataSet = customDataSet.GetChanges() myComponent.Validate(customDataSet)

Answer: C

Explanation:

DataSet.GetChanges method gets a copy of the DataSet containing all changes made to it since it was last loaded, or since Accept Changes was called. It is used to create a second DataSet that features only the changes to the data. We then validate the changes, the changed DataSet.

Reference:

.NET Framework Class Library, DataSet.GetChanges Method [Visual Basic]

.NET Framework Class Library, DataSet Class [Visual Basic]

Incorrect Answers

A, B: We should create a dataset which contains only the changes.

D: We should validate only the changes, not the whole dataset Customer DataSet.

QUESTION 10

As a programmer at Certkiller inc, you use Visual Studio .NET to create several applications that will be deployed commercially over the Internet. You must ensure that customers can verify the authenticity of your software. Which action or actions should you take? (Choose all that apply.)

- A. Sign your portable executables by using Signcode.exe.
- B. Generate an X.509 certificate by using Makecert.exe.
- C. Purchase an X.509 certificate from a certificate authority.
- D. Purchase a Software Publisher Certificate from a certificate authority.
- E. Convert your certificate to a Software Publisher Certificate by using Cert2spc.exe.

Answer: A, D

Explanation:

D: We must use a Software Publisher Certificate from a certificate authority.

A: We then use this certificate to sign the portable executables with the Signcode.exe utility.

Reference:

Visual Basic and Visual C# Concepts, Code Security and Signing in Components

.NET Framework Tools, File Signing Tool (Signcode.exe)

.NET Framework Tools, Certificate Creation Tool (Makecert.exe)

Windows Storage System Technical Articles, Microsoft Windows 2000 Public Key Infrastructure

.NET Framework Tools, Software Publisher Certificate Jack Tool (Cert2spc.exe)

Incorrect Answers

B: The Certificate Creation tool generates X.509 certificates for testing purposes only.

C: We should use a Software Publisher Certificate, not a X.509 certificate.

E: The Software Publisher Certificate Jack tool creates a Software Publisher's Certificate (SPC) from one or more X.509 certificates. Cert2spc.exe is for test purposes only.

QUESTION 11

You develop a Windows-based time and billing application named Certkiller Billing. You create a simple user interface to capture user-entered data.

The application passes an Object array of user-entered values to a function named AddUpDateTimeEntry. This function uses the LoadDataRow method of the Data Table object either to update an existing record in the table or to add a new record. When you test Certkiller Billing, you frequently receive an exception of type InvalidCastException. What is the cause of this error?

A. You are trying to load a duplicate value into a Data Table column that has a unique constraint.

B. The number of items in your Object array does not match the number of columns in the Data Table object.

C. The data that you are trying to load into a column is not the correct data type specified for that column.

D. The columns in your Data Table object do not have the AllowDBNull property set to True.

Answer: C

Explanation:

InvalidCastException Class implements the exception that is thrown for invalid casting or explicit conversion. An InvalidCastException could be caused by an incorrect data type.

QUESTION 12

You use Visual Studio .NET to create an assembly that will be consumed by other Visual Studio .NET applications. No Permissions should be granted to this assembly unless the assembly makes a minimum permission request for them. Which code segment should you use?

A. <Assembly: _ PermissionSet(SecurityAction.PermitOnly, _ Unrestricted := True)>

B. <Assembly: _ PermissionSet(SecurityAction.PermitOnly, _ Unrestricted := False)>

C. <Assembly: _ PermissionSet(SecurityAction.RequestOptional, _ Unrestricted := True)>

D. <Assembly: _ PermissionSet(SecurityAction.RequestOptional, _ Unrestricted := False)>

Answer: D

Explanation:

The Request Optional Security Action requests for additional permissions that are optional (not required to run). This action can only be used within the scope of the assembly. The code needs only the minimum set of permissions and no others. It should not be granted any optional permissions that it has not specifically requested. We must therefore use Unrestricted := False.

Reference:

.NET Framework Developer's Guide, Requesting Optional Permissions

Incorrect Answers:

A, B: The Permit Only Security Action does not support Assembly as a target, it only supports Class or Method as targets.

C: The assembly must only be granted minimal permissions. It should not be granted any optional permissions that it has not specifically requested.

QUESTION 13

Your company CertkillerInc. standardizes on the .NET Framework as its software development platform. Subsequently, virus attacks cause your company to prohibit the execution of any applications downloaded from the Internet. You must ensure that all client computers on your intranet can execute all .NET applications originating from your company. You must also ensure that the execution of .NET applications downloaded from the Internet is prohibited. You must expend the minimum amount of administrative effort to achieve your goal. Which policy should you modify?

- A. Application Domain.
- B. Enterprise
- C. Machine
- D. User

Answer: B

Explanation:

An Enterprise policy applies to the whole domain of the company. It would require minimal administrative effort to set up.

Reference:

.NET Framework Developer's Guide Security Policy Administration Overview

Incorrect Answers:

A: An Application Domain policy is defined by the runtime host (any application that hosts the common language runtime) for setting load-time policy. This level cannot be administered.

C: A machine policy only applies to a single machine.

D: A user policy only applies to a single user.

QUESTION 14

You create a user control named ScrollControl, which you plan to sell to developers. You want to ensure that ScrollControl can be used only by developers who purchase a license to use it. You decide to use a license provider implemented by the LicFileLicenseProvider class. Now you need to add code to ScrollControl to test for a valid control license. Which two code segments should you add? (Each correct answer presents part of the solution. Choose two)

A. <LicenseProvider(GetType(LicFileLicenseProvider))>

B. <LicenseProvider(GetType(ScrollControl))>

C. In the Load event handler for ScrollControl, place the following code segment: Try

LicenseManager.Validate(GetType(ScrollControl)) Catch ex As Exception 'Insert code to disallow use. End Try

D. In the Load event handler for ScrollControl, place the following code segment: Try

Dim ControlLicense As License ControlLicense = _ LicenseManager.Validate(GetType(ScrollControl), Me) Catch ex As Exception 'Insert code to disallow use.

End Try

E. In the Load event handler for ScrollControl, place the following code segment: Try Dim bLicensed As

Boolean bLicensed = _ LicenseManager.IsValid(GetType(ScrollControl)) Catch ex As Exception 'Insert code to disallow use. End Try

F. In the Load event handler for ScrollControl, place the following code segment: Try Dim bLicensed As Boolean Dim ControlLicense As License bLicensed = _ LicenseManager.IsValid(GetType(ScrollControl),Me, _ ControlLicense) Catch ex As Exception 'Insert code to disallow use. End Try

Answer: A, D

Explanation:

To enable licensing for your component

1. Apply a LicenseProviderAttribute to the LicFileLicenseProvider class. This is A).

2. Call LicenseManager.Validate or LicenseManager.IsValid in the constructor. This is D).

A: When you create a component that you want to license, you must specify the LicenseProvider by marking the component with a LicenseProviderAttribute. This is accomplished by:

<LicenseProvider(GetType(LicFileLicenseProvider))>

D: LicenseManager.Validate produces a license. The correct code to handle this is: Dim ControlLicense As License ControlLicense = LicenseManager.Validate(GetType(ScrollControl), Me) Reference:

.NET Framework Developer's Guide, Licensing Components and Controls [Visual Basic]

.NET Framework Class Library, LicenseProviderAttribute Class [Visual Basic]

Incorrect Answers

B: The LicFileLicenseProvider class, not ScrollControl class must be used.

C: The result of LicenseManager.Validate must be caught in a license variable.

E, F: The result of LicenseManager.Validate must be caught in a license variable, not a Boolean variable

QUESTION 15

As a software developer at Certkillerinc. you use Visual Studio .NET to create a Windows-based application. You need to make the application accessible to users who have low vision. These users navigate the interface by using a screen reader, which translates information about the controls on the screen into spoken words. The screen reader must be able to identify which control currently has focus. One of the TextBox controls in your application enables users to enter their names. You must ensure that the screen reader identifies this TextBox control by speaking the word "name" when a user changes focus to this control. Which property of this control should you configure?

A. Tag

B. Next

C. Name

D. Accessible Name

E. Accessible Role

Answer: D

Explanation:

The Accessible Name property is the name that will be reported to the accessibility aids.

Reference:

Visual Basic and Visual C# Concepts, Providing Accessibility Information for Controls on a Windows Form

Visual Basic and Visual C# Concepts, Walkthrough: Creating an Accessible Windows Application

Incorrect Answers

A, B, C: The Tag, Next and Name properties of a control is not used directly by accessibility aids.

E: The Accessible Role property describes the use of the element in the user interface.

QUESTION 16

You develop a Windows-based application that creates XML output from a DataSet object. The XML output is created by using the DataSet.WriteXml method and then is sent to another application. The second application requires the output to appear in the following format: <employee id="3" name="CertkillerSr" age="29" /> You need to write code to specify the format for the XML output. Which code segment should you use?

- A. ds.WriteXml(dataFile, _ XmlWriteMode.WriteSchema)
- B. ds.WriteXml(dataFile, _ XmlWriteMode.IgnoreSchema)
- C. Dim c As DataColumn For Each C in ds.Tables("employee").Columns c.ColumnMapping = MappingType.Attribute Next
- D. Dim c As DataColumn For Each c In ds.Tables("employee").Columns c.ColumnMapping = MappingType.Element Next

Answer: C

Explanation:

We want to produce an attribute list with no tags. The WriteSchema XmlWriteMode writes the current contents of the DataSet as XML data with the relational structure as inline XML Schema as is required in this scenario.

Reference:

.NET Framework Class Library, Mapping Type Enumeration .NET Framework Developer's Guide, Writing a DataSet as XML Data [Visual Basic]

NET Framework Class Library. DataSet.WriteXml Method [Visual Basic]

Incorrect Answers

All the other proposed solutions are inadequate since they would produce a tagged output:

```
<employee>
<id>3</id>
<name>Paul</name>
<age>29</age>
</employee>
```

QUESTION 17

You are developing a Windows-based application that logs hours worked by your employees. Your design goals require you to maximize application performance and minimize impact on server resources. You need to implement a SqlCommand object that will send a SQL INSERT action query to a database each time a user makes a new entry. To create a function named LineltemInser, you write the following code: (Line numbers are included for reference only.)

```
01 Function LineItemInsert(ByVal empid As Integer, _
02 ByVal projectID As Integer, ByVal hrs As Decimal, _
03 ByVal cnn As SqlConnection) As Integer
04 Dim SQL As String
05 Dim Ret As Integer
06 SQL = "INSERT INTO TimeEntries " & _
07 "(EmpID, ProjectID, Hours) VALUES " & _
08 "(" & empID & projectID & ", " & hrs & ")" "
09 Dim cmd As New SqlCommand(SQL, cnn)
```

10

11 'Insert new code.

12

13 End Function

Your code must execute the SQL INSERT action query and verify the number of database records that are affected by the query. Which code segment should you add on line 11?

A. cnn.Open() Ret = Cmd.ExecuteNonQuery() cnn.Close() Return Ret

B. cnn.Open() Ret = cmd.ExecuteScalar() cnn.Close() Return Ret

C. Dim reader as SqlDataReader cnn.Open() reader = cmd.ExecuteReader() cnn.Close() Return reader.RecordsAffected

D. Dim reader As SqlDataReader cnn.Open() reader = cmd.ExecuteReader() cnn.Close() Return reader.GetValue()

Answer: A

Explanation:

The SqlCommand.ExecuteNonQuery Method Executes a Transact-SQL statement against the Connection and returns the number of rows affected. This is the most effective solution.

Reference:

.NET Framework Class Library, SqlCommand.ExecuteNonQuery Method [Visual Basic]

.NET Framework Class Library, SqlCommand.ExecuteScalar Method [Visual Basic]

.NET Framework Class Library, SqlDataReader Class [Visual Basic]

.NET Framework Class Library, SqlDataReader.RecordsAffected Property [Visual Basic]

Incorrect Answers

B: The SqlCommand.ExecuteScalar method executes the query, and returns the first column of the first row in the result set returned by the query. Extra columns or rows are ignored.

C: There is no need use the ExecuteReader() method.

Note:

The SqlDataReader.RecordsAffected property gets the number of rows changed, inserted, or deleted by execution of the Transact-SQL statement.

D: There is no need use the ExecuteReader() method.

QUESTION 18

You use Visual Studio .NET to develop a Windows-based application. You implement security by using the security classes of the .NET Framework. Your application includes the following procedure. (Line numbers are included for reference only)

01 Public Sub ApproveVacation (ByVal user As String, -

02 ByVal role1 As string, ByVal, user 2 As String, _

03 ByVal role2 As String)

04 Dim PrincipalPerm1 As _

05 New PrincipalPermission(user1, role1)

06 Dim principalPerm2 As _

07 New PrincipalPermission(user2, role2)

08'Insert new code.

09'Additional procedure code goes here

10 End Sub

You must ensure that both User1 and User2 are members of the same security roles. Which code segment should you insert on line 8?

- A. `principalPerm1.IsUnrestricted principalPerm2.IsUnrestricted`
- B. `principalPerm1.IsSubSetOf(principalPerm2)`
- C. `principalPerm1.Intersect(principalPerm2).Demand()`
- D. `principalPerm1.Union(principalPerm2).Demand()`

Answer: C

Explanation:

Union means that either User1 or User2 could have the desired role whereas Intersect means that both User1 and User2 must have the desired role.

QUESTION 19

You use Visual Studio .NET to create an application that uses an assembly. The assembly will reside on the client computer when the application is installed. You must ensure that any future applications installed on the same computer can access the assembly. Which two actions should you take? (Each correct answer presents part of the solution. Choose two)

- A. Use XCOPY to install the assembly in the global assembly cache.
- B. Use XCOPY to install the assembly in the Windows\Assembly folder.
- C. Create a strong name for the assembly.
- D. Recompile the assembly by using the Native Image Generator (Ngen.exe).
- E. Modify the application configuration file to include the assembly.
- F. Use a deployment project to install the assembly in the global assembly cache.
- G. Use a deployment project to install the assembly in the Windows\System32 folder.

Answer: C, F

Explanation:

The global assembly cache stores assemblies specifically designated to be shared by several applications on the computer.

C: An assembly must have a strong name to be installed in the global assembly cache.

F: There are two ways to install an assembly into the global assembly cache:

- Using Microsoft Windows Installer 2.0. This could be achieved by a deployment project.
- Using the Global Assembly Cache tool (Gacutil.exe). This is not an option here.

Reference:

.NET Framework Developer's Guide, Working with Assemblies and the Global Assembly Cache

.NET Framework Developer's Guide, Installing an Assembly into the Global Assembly Cache

QUESTION 20

You use Visual Studio .NET to develop a Windows-Bases application named PatTrac. It uses the security class libraries of the .NET Framework to implement security. PatTrac will run within the context of a Windows 2000 domain named Medical Office. Calls to a remote Windows 2000 domain named Certkiller will occur during the execution of PatTrac. You want PatTrac to log on to the Certkiller domain by using a generic user account. What should you do?

- A. Create a new instance of the `WindowsImpersonationContext` class by calling the `Impersonate` method of the

Genericidentity object and passing the token of the user whom you want to impersonate.

B. Create a new instance of the WindowsImpersonationContext class by calling the Impersonate method of the Windows Identity object and passing the token of the user whom you want to impersonate.

C. Create a new instance of the ZoneIdentifyPermission class by calling the Impersonate method of the GenericPrincipal object and passing the token of the user whom you want to impersonate.

D. Create a new instance of the ZoneIdentifyPermission class by calling the Impersonate method of the WindowsPrincipal object and passing the token of the user whom you want to impersonate.

Answer: B

Explanation:

We must impersonate another user. The WindowsImpersonationContext Class, not ZoneIdentifyPermission class, should be used. Furthermore the Impersonate method must be used on a Windowsidentity object, not on a Genericidentity object.

Reference:

.NET Framework Class Library, WindowsImpersonationContext Class [Visual Basic]

QUESTION 21

You use Visual Basic .NET to develop a Windows-based application. You plan to reuse a procedure written in Visual Basic 6.0. The procedure includes the following array declaration: Dim Employees(1 to 10) As String You copy and paste the array declaration from the Visual Basic 6.0 project into the new Visual Basic .NET project. Now you must ensure that the Employees array will compile in the Visual Basic .NET application. What should you do?

A. Include the Option Base 1 statement in the Declaration section of the module.

B. Include the Option Base 0 statement in the Declaration section of the module.

C. Replace the Dim statement with the following code segment: Dim Employees(0 to 9) As String

D. Replace the Dim statement with the following code segment: Dim Employees(9) As String

E. After the Dim statement, add the following code segment: ReDim Employees(0 to 9) As String

F. After the Dim statement, add the following code segment: ReDim Employees(9) As String

Answer: D

Explanation:

Array lower bounds is supported in Visual Basic 6.0, but not in Visual Basic .Net.

Reference:

Visual Basic Language Reference, Dim Statement

QUESTION 22

You develop a Windows Form that provides online help for users. You want the help functionality to be available when users press the F1 key. Help text will be displayed in a pop-up window for the text box that has focus. To implement this functionality, you need to call a method of the Help Provider control and pass the text box and the help text. Which method should you call?

A. SetShowHelp

B. SetHelpString

C. SetHelpKeyword

D. ToString

Answer: B

Explanation:

To associate a specific Help string with another control, use the `SetHelpString` method. The string that you associate with a control using this method is displayed in a pop-up window when the user presses the F1 key while the control has focus. Reference: Visual Basic and Visual C# Concepts, Introduction to the Windows Forms Help Provider Component

QUESTION 23

You use Visual Studio .NET to create a Windows-based application. The application captures screen shots of a small portion of the visible screen. You create a form named `CertkillerCameraForm`. You set the `CertkillerCameraForm.BackColor` property to Blue. You create a button on the form to enable users to take a screen shot. Now, you need to create a transparent portion of `CertkillerCameraForm` to frame a small portion of the screen. Your application will capture an image of the screen inside the transparent area. The resulting appearance of `CertkillerCameraForm` is shown in the exhibit:

Missing

You add a Panel control to `CertkillerCameraForm` and name it transparent Panel. You must ensure that any underlying applications will be visible within the panel. Which two actions should you take? (Each correct answer presents part of the solution. Choose two.)

- A. Set `transparentPanel.BackColor` to Red.
- B. Set `transparentPanel.BackColor` to Blue.
- C. Set `transparentPanel.BackgroundImage` to None.
- D. Set `transparentPanel.Visible` to False.
- E. Set `CameraForm.Opacity` to 0%.
- F. Set `CameraForm.TransparencyKey` to Red.
- G. Set `CameraForm.TransparencyKey` to Blue.

Answer: A, F

Explanation:

A: We set the Background color of the Panel to Red.

F: We then the transparency color of the Form to Red as well. This will make only the Panel transparent, since the background color of the form is Blue.

QUESTION 24

You develop an inventory management application called `Certkiller Management` that will call a Microsoft SQL Server stored procedure named `sp_GetDaily Certkiller Sales`. The stored procedure will run a query that returns your daily sales total as an output parameter. This total will be displayed to users in a message box. Your application uses a `SqlCommand` object to run `sp_GetDaily CertkillerSales`. You write the following code to call `sp_GetDailyCertkillerSales`:
`Dim cnn As SqlConnection = New SqlConnection (myConnString)`
`Dim cmd As SqlCommand = New _ SqlCommand("sp_GetInventoryLevel", cnn)`
`cmd.CommandType = CommandType.StoredProcedure`
`Dim parm As SqlParameter =cmd.Parameters.Add(__ "@ItemTotal", SqlDbType.Int)`
`parm.Direction =ParameterDirection. Output`
`cnn. Open()`
`cmd.ExecuteNonQuery()`
Now you must write additional code to access the output parameter. Which code segment should you use?

- A. `MessageBox.Show("Total is: " & _ cmd.Parameters("@Output").Value.ToString())`

- B. `MessageBox.Show("Total is: " & _cmd.Parameters("@Output").ToString())`
- C. `MessageBox.Show("Total is: " & _cmd.Parameters("@ItemTotal").Value.ToString())`
- D. `MessageBox.Show("Total is: " & _cmd.Parameters("@ItemTotal").ToString())`

Answer: C

Explanation:

The @ItemTotal parameter is declared as an output parameter with SQL Server data type INT. We use the Value property of the SqlParameter class to retrieve the value of this parameter. We must also convert the INT value to a string value with the ToString method. We then supply this string to the MessageBox.Show method.

Reference:

- .NET Framework Class Library, SqlParameter Class [Visual Basic]
- .NET Framework Class Library, SqlParameter.Direction Property [Visual Basic]
- .NET Framework Class Library, SqlParameter.SqlDbType Property [Visual Basic]
- .NET Framework Class Library, SqlParameter.Value Property [Visual Basic]

Incorrect Answers

A, B: The @ItemTotal parameter is the output parameter. Using @Output this way is incorrect. Output is a keyword and no variable named @Output has been declared.

D: We must use the Value method to retrieve the value of the parameter.

QUESTION 25

You develop a Windows-based application to manage business contacts. The application retrieves a list of contacts from a central database called CertkillerDB. The list of contacts is managed locally in a DataSet object named contactDataSet. To set the criteria for retrieval, your user interface must enable users to type a city name into a TextBox control. The list of contacts that match this name must be displayed in a DataGrid control.

Which code segment should you use?

- A. `Dim dv As New DataView() With dv .Table = contactDataSet.Tables(0) .RowFilter = TextBox1.Text End With DataGrid1.DataSource = dv`
- B. `Dim dv As New DataView() With dv .Table = contactDataSet.Tables(0) .RowFilter = "City = " & TextBox1.Text & "" End With DataGrid1.DataSource = dv`
- C. `Dim dv As New DataView() With dv .Table = contactDataSet.Tables(0) .Sort = TextBox1.Text End With DataGrid1.DataSource = dv`
- D. `Dim dv As New DataView() With dv .Table = contactDataSet.Tables(0) .Sort = "city = " & TextBox1.Text & "" End With DataGrid1.DataSource = dv`

Answer: B

Explanation:

To form a RowFilter value, specify the name of a column followed by an operator and a value to filter on. The value must be in quotes. Here we use construct the rowfilter with the = operator, string concatenation (&) and the TextBox1.Text property. Reference: .NET Framework Class Library, DataView.RowFilter Property [Visual Basic] Incorrect Incorrect Answers:

A: We must use the = operator and construct an expression. We cannot just use a value.

C, D: We want to filter the Dataset, not to sort it.

QUESTION 26

You develop a Windows-based application named Certkiller Purchase that exchanges data with an accounting application. Purchase receives purchase order data from the accounting application in XML format. Users of Certkiller Purchase review and edit the data. Certkiller Purchase maintains the data in a DataSet object while users are working. When they are finished making changes, Certkiller Purchase must create an output file that will be returned to the accounting application. For verification and auditing purposes, the accounting application must receive both the user changes and the original values. Now you need to write code that will create the output file. What should you do?

- A. Call the DataSet.WriteXmlSchema method and specify a TextWriter object as the argument.
- B. Call the DataSet.WriteXmlSchema method and specify an XmlWriter object as the argument.
- C. Call the DataSet.WriteXml method and specify WriteSchema as the XmlWriteMode parameter.
- D. Call the DataSet.WriteXml method and specify DiffGram as the XmlWriteMode parameter.

Answer: D

Explanation:

A DiffGram is an XML format that is used to identify current and original versions of data elements. Here we use the DataSet. WriteXml method with the Diffgram XmlWriteMode to write the entire DataSet as a DiffGram, including original and current values. Reference:

.NET Framework Developer's Guide, DiffGrams

.NET Framework Developer's Guide, Writing a DataSet as XML Data [Visual Basic]

Incorrect Answers

A, B: We want to write the Dataset in XML format, not as an XML schema.

C: The WriteSchema XmlWriteMode writes only the current contents of the DataSet as XML data (with the relational structure as inline XML Schema).

QUESTION 27

You develop an application that enables users to enter and edit purchase order details. The application includes a Windows Form named DisplayCertkillerForm. The application uses a client-side DataSet object to manage data. The DataSet object contains a Data Table object named CertkillerDetails. This object includes one column named Quantity and another named UnitPrice. For each item on a purchase order, your application must display a line item total in a DataGrid control on DisplayCertkillerForm. The line item is the product of Quantity times UnitPrice. Your database design does not allow you to store calculated values in the database. You need to add code to your Form_Load procedure to calculate and display the line item total. Which code segment should you use?

- A. Dim totalColumn As New DataColumn("Total", _ Type.GetType("System.Decimal")) CertkillerDetails.Columns.Add (totalColumn) totalColumn.Expression = "Quantity * UnitPrice"
- B. Dim totalColumn As New DataColumn("Total", _ Type.GetType("System.Decimal")) CertkillerDetails.Columns.Add(totalColumn) totalColumn.Equals("Quantity * UnitPrice")
- C. CertkillerDetails.DisplayExpression("Quantity * UnitPrice")
- D. CertkillerDetails.DisplayExpression("quantityColumn + _ unitPriceColumn")

Answer: A

Explanation:

We use the Expression property of the DataColumn object calculate the values in the column.

Reference:

.NET Framework Developer's Guide, Creating Expression Columns [Visual Basic]

.NET Framework Class Library, DataColumn Class [Visual Basic]
.NET Framework Class Library, Object.Equals Method (Object) [Visual Basic]
.NET Framework Class Library, DataTable.DisplayExpression Property [Visual Basic]

Incorrect Answers

B: The Equals method cannot be used in this way. The equals method is used to test if different objects are equal.

C, D: The Displayed Expression would be set to a string value, not a calculated value.

QUESTION 28

Your company Certkiller, uses Visual Studio .NET to develop internal applications. You create a Windows control that will display custom status bar information. Many different developers at Certkiller will use the control to display the same information in many different applications. The control must always be displayed at the bottom of the parent form in every application. It must always be as wide as the form. When the form is resized, the control should be resized and repositioned accordingly. What should you do?

- A. Create a property to allow the developers to set the Dock property of the control. Set the default value of the property to AnchorStyle.Bottom.
- B. Create a property to allow the developer to set the Anchor property of the control. Set the default value of the property to AnchorStyle.Bottom.
- C. Place the following code segment in the UserControl_Load event: Me.Dock = DockStyle.Bottom
- D. Place the following code segment in the UserControl_Load event: Me.Anchor = AnchorStyle.Bottom

Answer: C

Explanation:

DockStyle.Bottom docks the control to the bottom of the form. This will force the control to be as wide as to form. Furthermore the control will be resized automatically.

Reference:

Visual Basic and Visual C# Concepts, Aligning Your Control to the Edges of Forms NET Framework Class Library, Anchor Styles Enumeration [Visual Basic]

Incorrect Answers

A: There is no need to the other developers to set the Dock property.

B: The Dock property should be used.

D: The Anchor style class specifies how a control anchors to the edges of its container. Not how a control is docked.

QUESTION 29

You use Visual Studio .NET to develop applications for your human resources department. You create the following interfaces: Public Interface IEmployee Property Salary() As Double End Interface Public Interface IExecutive Inherits IEmployee Property AnnualBonus() As Double End Interface The IEmployee interface represents a generic Employee concept. All actual employees in your company should be represented by interfaces that are derived from IEmployee. Now you need to create a class named Manager to represent executives in your company. You want to create this class by using the minimum amount of code. You write the following code: Public Class Manager End class Which additional code segment or segments should you include in Manager? (Choose all that apply)

- A. Implements IExecutive
- B. Implements IEmployee, IExecutive
- C. Inherits IExecutive
- D. Inherits IEmployee, IExecutive
- E. Property Salary() As Double Implements IExecutive.Salary
- F. Property AnnualBonus() As Double Implements _
IExecutive.AnnualBonus

Answer: A, E, F

A: A class can implement an Interface. The Manager class should implement the IExecutive interface.

E, F: The properties that are defined in the Interface must be implemented in a Class.

Incorrect Answers

B: The class should not implement both Interfaces, just the IExecutive interface.

C, D: A class cannot inherit from an Interface.

Explanation:

The Manager Class only needs to inherit from the IExecutive class. The Manager class inherits the AnnualBonus property from the IExecutive class and the Salary property from the IEmployee class (since IExecutive inherits from IEmployee). There is no need to define any properties for the new class.

Reference:

Visual Basic Language Concepts, Inheritance Basics

QUESTION 30

Your development team is creating a new Windows-based application for the Certkillercompany. The application consists of a user interface and several XML Web services. You develop all XML Web services and perform unit testing. Now you are ready to write the user interface code. Because some of your servers are being upgraded, the XML Web service that provides mortgage rates is currently offline. However, you have access to its description file. You must begin writing code against this XML Web service immediately. What should you do?

- A. Generate the proxy class for the XML Web service by using Disco.exe.
- B. Generate the proxy class for XML Web service by using Wsdl.exe.
- C. Obtain a copy of the XML Web service assembly and register it on your local development computer.
- D. Add the description file for the XML Web service to your Visual Studio .NET project.

Answer: B

Explanation:

Ordinarily to access an XML Web service from a client application, you first add a Web reference, which is a reference to an XML Web service. When you create a Web reference, Visual Studio creates an XML Web service proxy class automatically and adds it to your project. However, you can manually generate a proxy class using the XML Web services Description Language Tool, Wsdl.exe, used by Visual Studio to create a proxy class when adding a Web reference. This is necessary when you are unable to access the XML Web service from the machine on which Visual Studio is installed, such as when the XML Web service is located on a network that will not be accessible to the client until run time. You then manually add the file that the tool generated to your application project.

Reference:

Visual Basic and Visual C# Concepts, Locating XML Web Services Visual Basic and Visual C# Concepts, Generating an XML Web Service Proxy
