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## 問題集

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**Exam : 70-554**

**Title : UPGRADE:MCSD MS.NET  
Skills**

**Version : DEMO**

1. You are creating a Web service.

You need to add an operation that can be called without returning a message to the caller.

Which code should you use?

A. [WebMethod]

```
[SoapDocumentMethod(OneWay = true)]  
public bool ProcessName(string name) {  
    return false;  
}
```

B. [WebMethod]

```
[OneWay()]  
public void ProcessName(string name) {  
}
```

C. [WebMethod]

```
[SoapDocumentMethod(OneWay = true)]  
public void ProcessName(string name) {  
}
```

D. [WebMethod]

```
[SoapDocumentMethod(Action = "OneWay")]  
public void ProcessName(string name) {  
}
```

Answer: C

2. You are creating a Web service.

You need to add an operation that can be called without returning a message to the caller.

Which code should you use?

A. <WebMethod()> \_

<SoapDocumentMethod(OneWay:=True)> \_

Public Function ProcessName(ByVal Name As String) As Boolean

...

Return False

End Function

B. <WebMethod()> \_

<OneWay()> \_

Public Sub ProcessName()

...

End Sub

C. <WebMethod()> \_

<SoapDocumentMethod(OneWay:=True)> \_

Public Sub ProcessName()

...

End Sub

D. <WebMethod()> \_

<SoapDocumentMethod(Action:="OneWay")> \_

Public Sub ProcessName()

...

End Sub

Answer: C

3. You are an enterprise application developer. You are creating a component that will be deployed as part of a

class library. The component must meet the following specifications:

The interface of the component must be accessible to components outside the hosting assembly.

The interface of the component must be interoperable with components written in any other .NET Framework languages.

The implementation of the component cannot be expanded upon by a derived class.

You need to design the interface of the component.

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

A. Apply the CLSCompliant(true) attribute to the assembly and component definition.

B. Apply the abstract keyword to the component definition.

C. Apply the ComVisible(true) attribute to the assembly and component definition.

D. Create a primary interop assembly for the assembly that hosts your component.

E. Apply the sealed keyword to the component definition.

F. Apply the public keyword to the component definition.

Answer: A AND E AND F

4. You are an enterprise application developer. You are creating a component that will be deployed as part of a class library. The component must meet the following specifications:

The interface of the component must be accessible to components outside the hosting assembly.

The interface of the component must be interoperable with components written in any other .NET Framework languages.

The implementation of the component cannot be expanded upon by a derived class.

You need to design the interface of the component.

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

A. Apply the CLSCompliant(True) attribute to the assembly and component definition.

B. Apply the MustInherit keyword to the component definition.

C. Apply the ComVisible(True) attribute to the assembly and component definition.

D. Create a primary interop assembly for the assembly that hosts your component.

E. Apply the NotInheritable keyword to the component definition.

F. Apply the Public keyword to the component definition.

Answer: A AND E AND F

5. You are an enterprise application developer. You are creating a component that processes loan requests. Your component will be used inside Microsoft Windows Forms client applications.

The loan request form is complex and time consuming to complete. Loan data is saved to a Microsoft SQL Server 2005 database.

You need to ensure that in case of a system failure the loan officer does not need to re-enter any

loandata.

What should you do?

- A. Implement a private Save method that saves all property values to the database. Call the Save method from inside your components finalizer.
- B. Implement code inside the Set accessor for each property that saves the property value to the database.
- C. Implement a public Save method that saves all property values to a static variable.
- D. Implement code inside the Set accessor that saves the property value to a static variable.

Answer: B

6. You are an enterprise application developer. You are creating a component that processes loan requests. Your component will be used inside Microsoft Windows Forms client applications.

The loan request form is complex and time consuming to complete. Loan data is saved to a Microsoft SQL Server 2005 database.

You need to ensure that in case of a system failure the loan officer does not need to re-enter any loan data. What should you do?

- A. Implement a Private Save method that saves all Property values to the database. Call the Save method from inside your components finalizer.
- B. Implement code inside the Set accessor for each Property that saves the Property value to the database.
- C. Implement a Public Save method that saves all Property values to a Shared variable.
- D. Implement code inside the Set accessor that saves the Property value to a Shared variable.

Answer: B

7. You are an enterprise application developer. You are creating a component to process geospatial data. The

component retrieves large sets of data from a Microsoft SQL Server database. Each data point consists of two decimal values: one value represents longitude and the other value represents latitude.

You need to design a data format that minimizes the managed heap memory allocation needed for each data point within the component.

What should you do?

- A. Design a custom class that contains private fields for the longitude and the latitude, and design read-only public properties for the longitude and the latitude.
- B. Design an XML element that contains an attribute for each longitude value and each latitude value.
- C. Design an ADO.NET DataRow class that contains DataColumnns for the longitude and latitude values.
- D. Design a custom Struct that contains a public field for the longitude value and a public field for the latitude value.

Answer: D

8. You are an enterprise application developer. You are creating a component to process geospatial data.

The component retrieves large sets of data from a Microsoft SQL Server database. Each data point consists of two decimal values: one value represents longitude and the other value represents latitude.

You need to design a data format that minimizes the managed heap memory allocation needed for each data point within the component.

What should you do?

- A. Design a custom class that contains Private fields for the longitude and the latitude, and design read-only Public properties for the longitude and the latitude.
- B. Design an XML element that contains an attribute for each longitude value and each latitude value.
- C. Design an ADO.NET DataRow class that contains DataColumnns for the longitude and latitude values.
- D. Design a custom Structure that contains a Public field for the longitude value and a Public field for the latitude value.

Answer: D

9. When you execute a client application, the following exception is thrown.

EncryptedKeyToken is expected but not present in the security header of the incoming message.

You discover that the exception is thrown when the client application invokes a Web service named Math with the following code. (Line numbers are included for reference only.)

```
01 try
02 {
03 MathWse ws = new MathWse ();
04 int result = ws.Add(1, 2);
05 }
06 catch (Exception ex)
07 {
08 MessageBox.Show(ex.Message);
09 }
```

The client application and Web service have the same Web Services Enhancements (WSE) 3.0 policy. The policy configuration file contains the following policy section.

```
<policy name="Secure">
<anonymousForCertificateSecurity
establishSecurityContext="false"
renewExpiredSecurityContext="true"
requireSignatureConfirmation="false"
messageProtectionOrder="SignBeforeEncrypt"
requireDerivedKeys="true"
ttlInSeconds="300">
<!-- XML defining the serviceToken and protection -->
</anonymousForCertificateSecurity>
</policy>
```

You need to ensure that the client application can communicate with the Web service.

What should you do?

- A. Add the following code between lines 03 and 04.  
ws.SetPolicy("Secure");
- B. Replace line 03 with the following code.  
Math ws = new Math();
- C. Add the following code between lines 03 and 04.  
ws.UseDefaultCredentials = true;
- D. Add the following code between lines 03 and 04.

```
UsernameToken u = new UsernameToken("userid", "password");
EncryptedKeyToken et = new EncryptedKeyToken(u);
ws.SetClientCredential(et);
```

E. Add the following code between lines 03 and 04.

```
ws.SetPolicy("anonymousForCertificateSecurity")
```

Answer: A

10. When you execute a client application, the following exception is thrown.

EncryptedKeyToken is expected but not present in the security header of the incoming message.

You discover that the exception is thrown when the client application invokes a Web service named Math with the following code. (Line numbers are included for reference only.)

```
01 Try
02 Dim ws As New MathWse()
03 Dim i As Integer = ws.Add(1, 2)
04 Console.WriteLine(i.ToString())
05 Catch ex As Exception
06 MessageBox.Show(ex.Message)
07 End Try
```

The client application and Web service have the same Web Services Enhancements (WSE) 3.0 policy.

The policy

configuration file contains the following policy section.

```
<policy name="Secure">
<anonymousForCertificateSecurity
establishSecurityContext="false"
renewExpiredSecurityContext="true"
requireSignatureConfirmation="false"
messageProtectionOrder="SignBeforeEncrypt"
requireDerivedKeys="true"
ttlInSeconds="300">
<!-- XML defining the serviceToken and protection -->
</anonymousForCertificateSecurity>
</policy>
```

You need to ensure that the client application can communicate with the Web service.

What should you do?

A. Add the following code between lines 02 and 03.

```
ws.SetPolicy("Secure")
```

B. Replace line 02 with the following code.

```
Dim ws As New Math()
```

C. Add the following code between lines 02 and 03.

```
ws.UseDefaultCredentials = True
```

D. Add the following code between lines 02 and 03.

```
Dim u As New UsernameToken("userid", "password")
Dim et As New EncryptedKeyToken(u)
```

`ws.SetClientCredential(et)`

E. Add the following code between lines 02 and 03.

`ws.SetPolicy("anonymousForCertificateSecurity")`

Answer: A

11. A client application calls a Web service named Math. Both the client application and Math are configured with a Web Services Enhancements (WSE) 3.0 policy named Secure to validate anonymous access for certificate security.

A Web reference to the Math Web service is added to the client application's project using Microsoft Visual Studio 2005. When the client application is built and executed, a `SoapException` exception is thrown with the following message.

The security requirements are not met because the security header is not included in the incoming message.

You need to ensure that the application runs without throwing the `SoapException` exception.

What should you do?

A. Add the following attribute to the Math proxy class definition.

`[Microsoft.Web.Services3.Policy("Secure")]`

B. Set the Name property for the `WebServiceBindingAttribute` attribute on the Math proxy class definition to `MathWseSoap`.

C. Add the following attribute to the Math proxy class definition.

`[Microsoft.Web.Services3.Policy("anonymousForCertificateSecurity")]`

D. Modify the Math proxy class so that it derives from the following protocol.

`System.Web.Services.Protocols.SoapHttpClientProtocol`

Answer: A

12. A client application calls a Web service named Math. Both the client application and Math are configured with a Web Services Enhancements (WSE) 3.0 policy named Secure to validate anonymous access for certificate security.

A Web reference to the Math Web service is added to the client application's project using Microsoft Visual Studio 2005. When the client application is built and executed, a `SoapException` exception is thrown with the following message.

The security requirements are not met because the security header is not included in the incoming message.

You need to ensure that the application runs without throwing the `SoapException` exception.

What should you do?

A. Add the following attribute to the Math proxy class definition.

`<Microsoft.Web.Services3.Policy("Secure")>`

B. Set the Name property for the `WebServiceBindingAttribute` attribute on the Math proxy class definition to `MathWseSoap`.

C. Add the following attribute to the Math proxy class definition.

`<Microsoft.Web.Services3.Policy("anonymousForCertificateSecurity")>`

D. Modify the Math proxy class so that it derives from the following class.

`System.Web.Services.Protocols.SoapHttpClientProtocol`

Answer: A



13. You are an enterprise application developer. You are manipulating a collection of customer, product, and supplier objects.

The collection objects must fulfill the following requirements:

The objects must use custom sort methods on different properties of the respective classes.

The objects must be strongly typed.

A developer from your team decides to use the following collection classes.

```
abstract class MyCollectionBase : System.Collections.CollectionBase {  
    abstract public void Sort();  
}  
  
public class CustomerCollection : MyCollectionBase {  
    //Code overriding CollectionBase methods  
    public override void Sort(){  
        //Customer sorting code  
    }  
}  
  
public class SupplierCollection : MyCollectionBase {  
    //Code overriding CollectionBase methods  
    public override void Sort(){  
        //Supplier sorting code  
    }  
}  
  
public class ProductCollection : MyCollectionBase {  
    //Code overriding CollectionBase methods  
    public override void Sort(){  
        //Product sorting code  
    }  
}
```

You need to review the code and recommend improvements to simplify maintenance, if necessary.

What should you conclude and recommend?

- A. The code does not need to be modified.
- B. The code needs to be modified. The MyCollectionBase class must implement the ICollection interface instead of inheriting from the CollectionBase class.
- C. The code needs to be modified. Use List<T> class instead of creating custom collections.
- D. The code needs to be modified. The child collection classes must inherit from the CollectionBase class instead of the MyCollectionBase class.

Answer: C

14. You are an enterprise application developer. You are manipulating a collection of customer, product, and supplier objects.

The collection objects must fulfill the following requirements:

The objects must use custom sort methods on different properties of the respective classes.

The objects must be strongly typed.

A developer from your team decides to use the following collection classes.

```
Public MustInherit Class MyCollectionBase
Inherits System.Collections.CollectionBase
Public MustOverride Sub Sort()
End Class
Public Class CustomerCollection
Inherits MyCollectionBase
'Code overriding CollectionBase methods
Public Overrides Sub Sort()
'Customer sorting method
End Sub
End Class
Public Class SupplierCollection
Inherits MyCollectionBase
'Code overriding CollectionBase methods
Public Overrides Sub Sort()
'Supplier sorting method
End Sub
End Class
Public Class ProductCollection
Inherits MyCollectionBase
'Code overriding CollectionBase methods
Public Overrides Sub Sort()
'Product sorting method
End Sub
End Class
```

You need to review the code and recommend improvements to simplify maintenance, if necessary.

What should you conclude and recommend?

- A. The code does not need to be modified.
- B. The code needs to be modified. The MyCollectionBase class must implement the ICollection interface instead of inheriting from the CollectionBase class.
- C. The code needs to be modified. Use List(Of T) class instead of creating custom collections.
- D. The code needs to be modified. The child collection classes must inherit from the CollectionBase class instead of the MyCollectionBase class.

Answer: C

15. A Web service application uses Web Services Enhancements (WSE) 3.0.

A class named RejectUnknownActorFilter is derived from the SoapFilter class. The

RejectUnknownActorFilter class throws a SoapException exception if the request contains an unexpected actor.

A class defines a policy assertion as follows. (Line numbers are included for reference only.)

```
01 public class RequireActorAssertion : PolicyAssertion {
02 public override SoapFilter
03 CreateClientInputFilter(FilterCreationContext context) {
```

```
04 return null;
05 }
06 public override SoapFilter
07 CreateClientOutputFilter(FilterCreationContext context) {
08 return null;
09 }
10 public override SoapFilter
11 CreateServiceInputFilter(FilterCreationContext context) {
12 return null;
13 }
14 public override SoapFilter
15 CreateServiceOutputFilter(FilterCreationContext context) {
16 return null;
17 }
18 }
```

You need to ensure that the Web service rejects any SOAP request that contains an unexpected actor. Your code

must minimize the server resources used to process the request.

What should you do?

A. Replace line 04 with the following line of code.

```
return new RejectUnknownActorFilter();
```

B. Replace line 08 with the following line of code.

```
return new RejectUnknownActorFilter();
```

C. Replace line 12 with the following line of code.

```
return new RejectUnknownActorFilter();
```

D. Replace line 16 with the following line of code.

```
return new RejectUnknownActorFilter();
```

Answer: C

16. A Web service application uses Web Services Enhancements (WSE) 3.0.

A class named `RejectUnknownActorFilter` is derived from the `SoapFilter` class. The

`RejectUnknownActorFilter`

class throws a `SoapException` exception if the request contains an unexpected actor.

A class defines a policy assertion as follows. (Line numbers are included for reference only.)

```
01 Public Class RequireActorAssertion
02 Inherits PolicyAssertion
03 Public Overrides Function CreateClientInputFilter(ByVal _
context As FilterCreationContext) As SoapFilter
04 Return Nothing
05 End Function
06
07 Public Overrides Function CreateClientOutputFilter(ByVal _
context As FilterCreationContext) As SoapFilter
08 Return Nothing
```

09 End Function

10

11 Public Overrides Function CreateServiceInputFilter(ByVal \_  
context As FilterCreationContext) As SoapFilter

12 Return Nothing

13 End Function

14

15 Public Overrides Function CreateServiceOutputFilter(ByVal \_  
context As FilterCreationContext) As SoapFilter

16 Return Nothing

17 End Function

18 End Class

You need to ensure that the Web service rejects any SOAP request that contains an unexpected actor.  
Your code

must minimize the server resources used to process the request.

What should you do?

A. Replace line 04 with the following line of code.

Return New RejectUnknownActorFilter()

B. Replace line 08 with the following line of code.

Return New RejectUnknownActorFilter()

C. Replace line 12 with the following line of code.

Return New RejectUnknownActorFilter()

D. Replace line 16 with the following line of code.

Return New RejectUnknownActorFilter()

Answer: C

17. An application has components named ComponentA, ComponentB, and ComponentC.

ComponentA and ComponentB update tables in a database named DB1. ComponentC updates tables in a database named DB2.

At run time, ComponentA is executed with either ComponentB or ComponentC in a single transaction.

You need to compose the transaction to minimize the use of the system resources.

What should you do?

A. Write the following code for the transaction.

[AutoComplete]

void ExecuteTransactions() {

...

}

B. Write the following code for the transaction.

void ExecuteTransactions() {

try {

...

ContextUtil.SetComplete();

}

catch {

```
ContextUtil.SetAbort();  
}  
}
```

C. Write the following code for the transaction.

```
void ExecuteTransactions() {  
    SqlConnection connection = new SqlConnection(...);  
    SqlTransaction trans = connection.BeginTransaction();  
    try {  
        ...  
        trans.Commit();  
    }  
    catch {  
        trans.Rollback();  
    }  
}
```

D. Write the following code for the transaction.

```
void ExecuteTransactions() {  
    using (TransactionScope txscope = new TransactionScope()) {  
        ...  
        txscope.Complete();  
    }  
}
```

Answer: D

18. An application has components named ComponentA, ComponentB, and ComponentC. ComponentA and ComponentB update tables in a database named DB1. ComponentC updates tables in a database named DB2.

At run time, ComponentA is executed with either ComponentB or ComponentC in a single transaction. You need to compose the transaction to minimize the use of the system resources.

What should you do?

A. Write the following code for the transaction.

```
<AutoComplete> _  
Sub ExecuteTransactions()  
    ...  
End Sub
```

B. Write the following code for the transaction.

```
Sub ExecuteTransactions()  
    Try  
        ...  
        ContextUtil.SetComplete()  
    Catch  
        ContextUtil.SetAbort()  
    End Try  
End Sub
```

C. Write the following code for the transaction.

```
Sub ExecuteTransactions()  
Dim connection As SqlConnection = New SqlConnection(...)  
Dim trans as SqlTransaction = connection.BeginTransaction();  
Try  
...  
trans.Commit()  
Catch  
trans.Rollback()  
End Try  
End Sub
```

D. Write the following code for the transaction.

```
Sub ExecuteTransactions()  
Using txscope As TransactionScope = new TransactionScope()  
...  
txscope.Complete()  
End Using  
}
```

Answer: D

19. You are writing a set of .NET Framework remoting components that will be hosted on an application server named Appserver1. The components must have the highest possible throughput.

You create the following class to be hosted in the remoting server.

```
public class OrderService : MarshalByRefObject {  
    public double SaveOrders (DataTable orders) {  
        //some lengthy synchronous database calls  
        ...  
    }  
}
```

You need to ensure that OrderService is available to remoting clients.

What should you do?

A. Within the initialization routine of the server application, include the following code segment.

```
TcpChannel chan = new TcpChannel(3085);  
ChannelServices.RegisterChannel(chan);  
RemotingConfiguration.RegisterWellKnownServiceType(  
    typeof(OrderService),  
    "OrderService.rem",  
    WellKnownObjectMode.SingleCall);
```

B. Within the initialization routine of the server application, include the following code segment.

```
HttpChannel chan = new HttpChannel(3085);  
ChannelServices.RegisterChannel(chan);  
RemotingConfiguration.RegisterWellKnownServiceType(  
    typeof(OrderService),  
    "OrderService.rem",
```

WellKnownObjectMode.Singleton);

C. Within the initialization routine of the server application, include the following code segment.

```
TcpChannel chan = new TcpChannel();  
ChannelServices.RegisterChannel(chan);  
OrderService sm = (OrderService)Activator.GetObject(  
typeof(OrderService),  
"tcp://appserver1:3085/OrderService.rem");
```

D. Within the initialization routine of the server application, include the following code segment.

```
HttpChannel chan = new HttpChannel();  
ChannelServices.RegisterChannel(chan);  
OrderService sm = (OrderService)Activator.GetObject(  
typeof(OrderService),  
"http://appserver1:3085/OrderServiceHost/OrderService.rem");
```

Answer: A

20. You are writing a set of .NET Framework remoting components that will be hosted on an application server named Appserver1. The components must have the highest possible throughput.

You create the following class to be hosted in the remoting server.

```
Public Class OrderService  
Inherits MarshalByRefObject  
Public Function SaveOrders(ByVal orders As DataTable) As Double  
...  
End Function  
End Class
```

You need to ensure that OrderService is available to remoting clients.

What should you do?

A. Within the initialization routine of the server application, include the following code segment.

```
Dim chan As New TcpChannel(3085)  
ChannelServices.RegisterChannel(chan, False)  
RemotingConfiguration.RegisterWellKnownServiceType( _  
GetType(OrderService), _  
"OrderService.rem", _  
WellKnownObjectMode.SingleCall)
```

B. Within the initialization routine of the server application, include the following code segment.

```
Dim chan As New HttpChannel()  
ChannelServices.RegisterChannel(chan, False)  
RemotingConfiguration.RegisterWellKnownServiceType( _  
GetType(OrderService), _  
"OrderService.rem", _  
WellKnownObjectMode.Singleton)
```

C. Within the initialization routine of the server application, include the following code segment.

```
Dim chan As New TcpChannel(3085)  
ChannelServices.RegisterChannel(chan, False)  
Dim sm As OrderService = CType(Activator.GetObject( _
```

```
GetType(OrderService), _  
"tcp://appserver1:3085/OrderService.rem"), _  
OrderService)
```

D. Within the initialization routine of the server application, include the following code segment.

```
Dim chan As New HttpChannel()  
ChannelServices.RegisterChannel(chan, False)  
Dim sm As OrderService = CType(Activator.GetObject( _  
GetType(OrderService), _  
"http: //appserver1:3085/OrderServiceHost/OrderService.rem"), _  
OrderService)
```

Answer: A