



**70-549**

**PRO: Designing and Developing Enterprise Applications by  
Using the Microsoft .NET Framework**

Q&A

DEMO Version

Copyright (c) 2007 Chinatag LLC. All rights reserved.

## **Important Note Please Read Carefully**

For demonstration purpose only, this free version Chinatag study guide contains **10** full length questions selected from our full version products which have more than **200** questions each.

This Study guide has been carefully written and compiled by Chinatag certification experts. It is designed to help you learn the concepts behind the questions rather than be a strict memorization tool. Repeated readings will increase your comprehension.

For promotion purposes, all PDF files are **not** encrypted. Feel free to distribute copies among your friends and let them know Chinatag website.

## **Study Tips**

This product will provide you questions and answers along with detailed explanations carefully compiled and written by our experts. Try to understand the concepts behind the questions instead of cramming the questions. Go through the entire document at least twice so that you make sure that you are not missing anything.

## **Latest Version**

We are constantly reviewing our products. New material is added and old material is revised. Free updates are available for 90 days after the purchase. You should check the products page on the <http://www.chinatag.com> website for an update 3-4 days before the scheduled exam date.

Please tell us what you think of our products. We appreciate both positive and critical comments as your feedback helps us improve future versions. Feedback on specific questions should be send to [feedback@chinatag.com](mailto:feedback@chinatag.com).

Thanks for purchasing our products and look forward to supplying you with all your Certification training needs.

Good studying!

Technical and Support Team  
Chinatag LLC.

**Exam Code: 70-549C#**  
**Practice Questions and Answers: 83**

**Question: 1**

You are an enterprise application developer. You design a data access component that interacts with a Microsoft SQL Server database. The component uses a database connection string. The database connection string is stored in clear text in the ConnectionStrings section of the application configuration file. During testing, you discover that the component might be vulnerable to SQL injection attacks. You need to adopt a strategy to protect the component from SQL injection attacks. What should you do?

- A. Replace all dynamic SQL statements with parameterized SQL statements that use strongly typed SQL parameters.
- B. Construct all dynamic SQL statements by using a SecureString object.
- C. Modify the method so that it throws an exception if the SQL statement does not return any rows.
- D. Encrypt the ConnectionStrings section of the configuration file.

**Answer: A**

**Question: 2**

You are an enterprise application developer. You are implementing a new component for an application. The component accesses a database to populate a list of customer objects and exposes a method that is named GetAllCustomers. The component uses a design pattern to access the database only on an as-needed basis. A caching mechanism exists in a lower tier of the application architecture. The component must not cache data. You need to implement the logic for populating a list of customer objects by using a database query. You also need to ensure that you meet the company guidelines for the component design pattern. What should you do?

- A. Execute a query in the constructor of the component to populate a field of type List<Customer>. Return the List reference in the call to the GetAllCustomers method.
- B. Execute a query in the static constructor of the component to populate a static field of type List<Customer>. Return the List reference in the call to the GetAllCustomers method.
- C. Execute a query in the GetAllCustomers method to populate a local variable of type List<Customer>. Return the List reference.
- D. Execute a query in the GetAllCustomers method to populate a field of type List<Customer> only if the field is null. Return the List reference.

**Answer: C**

**Question: 3**

You are an enterprise application developer. You are creating the first version of an application to manage rich text documents.

The application must meet the following design requirements:

- Support the file system and a Microsoft SQL Server database as data stores.
- Ensure the following for future versions:
  - Add support for additional data stores, including network storage.
  - Acquire the ability to interface with third-party-distributed authoring and versioning tools.
- Bring additional storage options online without having to redeploy the entire application.

You need to identify an appropriate approach to meet these requirements. Which approach should you choose?

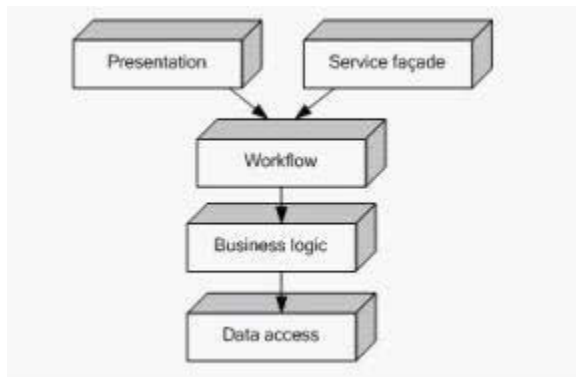
- A. Create a single Document component to represent the rich text content of a document and include methods on the component to persist and retrieve rich text for each type of data store.

- B. Create a single Document component to represent the rich text content of a document and an enumeration to represent each available data store. Include a parameter of the enumerated type in methods interfacing with a data store.
- C. Create a single Document component to represent the rich text content of a document and an enumeration to represent each available data store. Include a property on the Document component to permit the selection of a data store.
- D. Create a Document component to represent the rich text content of a document. Create a DocumentRepository component to manage the various data stores.

**Answer: D**

**Question: 4**

You are an enterprise application developer. You are creating an application that has a layered architecture as shown in the following diagram.



A component that resides in the workflow layer manages transactions across one or more activities in the business logic layer. You need to make modifications to the component. You need to identify the layers that might require modification when the component in the workflow layer is modified. Which two layers should you identify? (Each correct answer presents part of the solution. Choose two.)

- A. Presentation layer
- B. Service façade layer
- C. Business logic layer
- D. Data access layer

**Answer: A, B**

**Question: 5**

You are an enterprise application developer. You are creating a .NET Remoting component. The Version 1.0 of the component is deployed as a well-known server-activated object. The strong-named component is installed into the global assembly cache. Ten distributed applications in your company utilize the component, and each application has an independent schedule for upgrades and deployment. You add new features to the component. These additions will change the signatures of the public methods on the component. You need to devise a deployment strategy for the component. What should you do?

- A. Deploy the component in place of the existing well-known object.
- B. Deploy the component as a well-known object.
- C. Increment the version number of the component assembly. Deploy the component in place of the existing well-known object.

D. Increment the version number of the component assembly. Deploy the component as a new well-known object.

**Answer: B**

**Question: 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 static variable.
- D. Implement code inside the Set accessor that saves the property value to a static variable.

**Answer: B**

**Question: 7**

You are an enterprise application developer. You create a component that generates medical documents. Your component is used by multiple document management systems. Users generate documents throughout the entire day and most documents are generated during business hours. You notice that user load is increasing and performance is degrading. You need to identify sections of code on which to focus performance tuning efforts. Which two actions should you recommend? (Each correct answer presents part of the solution. Choose two.)

- A. Analyze the resource usage for the objects created in the component.
- B. Analyze the execution time for methods in the component.
- C. Analyze the time periods of peak frequency of document creation.
- D. Analyze which application users are generating the greatest number of documents.
- E. Analyze which client applications are generating the greatest number of documents.

**Answer: A, B**

**Question: 8**

You are an enterprise application developer. You are creating a component that will be used in an order fulfillment process.

The component performs the following two tasks:

- Modifies data in a local Microsoft SQL Server database
- Adds data to a remote SQL Server database

The application that uses the component is multithreaded. Each application thread that uses the component creates its own instances of the component classes. You need to ensure that the component either performs both tasks successfully or performs neither task. What should you do?

- A. Use the System.Threading.Monitor class to synchronize the code segment that performs the data modifications and submits the message.
- B. Use classes in the System.Transactions namespace to enlist both tasks in a distributed transaction.

- C. Enable Multiple Active Result Sets (MARS) for each database connection.
- D. Use ADO.NET DataAdapter objects that are configured to support batch updates.

**Answer: B**

**Question: 9**

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, E, F**

**Question: 10**

You are an enterprise application developer. You are creating an application that will deploy an on-demand training program. The training is a combination of documents and video files that the user can access from an internal server on the LAN. Users might access this application through their home computers when they are connected to the corporate network through a virtual private network (VPN). You need to design the video portion for the on-demand training program. You also need to ensure that users can view the videos without making modifications to their computer configuration. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

- A. Create one file for all demonstrations.
- B. Create a set of files that have different qualities for different connection speeds.
- C. Create a set of files that have different formats for different players.
- D. Create a set of files for the corporate office and one set for the branch offices.
- E. Create a set of files for the VPN users.
- F. Create a set of files that require license keys to protect the content.

**Answer: B, C**