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練習問題

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1年間無料アップデート

Exam : 070-549(C#)

**Title : Designing and Developing
Enterprise Applications
Using C#**

Version : DEMO

1. You are an enterprise application developer. You are creating a client/server application. You need to install the application on the company network.

The client/server application must meet the following criteria:

- The server component is a class library that is created by using the .NET Framework.
- The client component is a Microsoft Windows-based application that is created by using the .NET Framework.
- The client component and the server component must communicate by using a binary protocol
- The fewest possible ports are opened between the client component and the server component.

You need to identify a technology that permits the server to communicate with the client component through the TCP/IP protocol.

Which technology should you use?

- A. Message Queuing
- B. .NET Remoting
- C. Web services
- D. DCOM

Answer: B

2. You are an enterprise application developer. You are creating an application that will track shipments. This application must support integration with applications that run on different platforms and operating systems. The application that you are creating can be invoked only through SOAP messages over HTTP. You choose Web services instead of .NET Remoting to meet these requirements.

You need to specify the reason for choosing Web services.

Which statement should influence your decision?

- A. SOAP messages cannot be exchanged in .NET Remoting.
- B. Web Services Description Language documents cannot be generated from .NET Remoting class definitions.
- C. .NET Remoting objects will not be interoperable with other platforms.
- D. .NET Remoting objects cannot be invoked through HTTP.

Answer: C

3. You are an enterprise application developer. You are creating an application for the sales department. Users in the sales department are occasionally connected to the network. Users enter orders through a smart client interface. The orders are sent to a business component that is installed on an application server. The business component updates the orders.

You need to ensure that the orders are reliably delivered to the server.

Which technology should you choose?

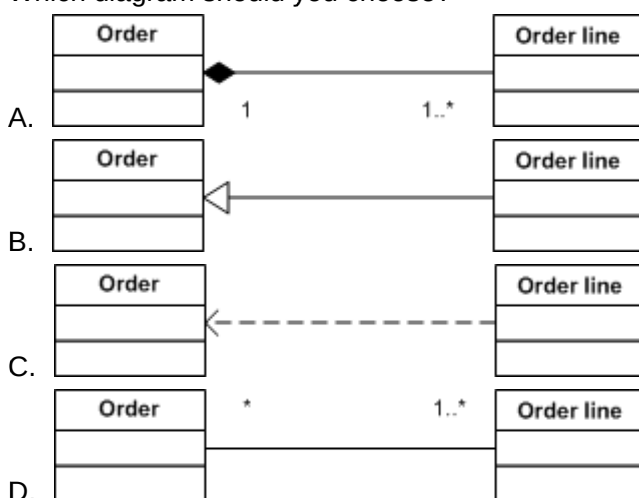
- A. .NET Remoting
- B. Web services
- C. Message Queuing
- D. DCOM

Answer: C

4. You are an enterprise application developer. You are creating an application. Within your application, an order contains order lines. Order lines are always contained within an order.

You need to analyze this structure and show the link between the order and the order line by using a class diagram.

Which diagram should you choose?



Answer: A

5. You are an enterprise application developer. You are creating an application. The application uses different database products for different customers.

You need to ensure maximum reuse of the code that is available in the different layers of the application.

You also need to ensure that the application uses the unique features of each database product.

Which layer should you create for each database product?

- A. Business layer
- B. Data access layer
- C. Business process layer
- D. Service layer

Answer: B

6. You are an enterprise application developer. You create an order processing application.

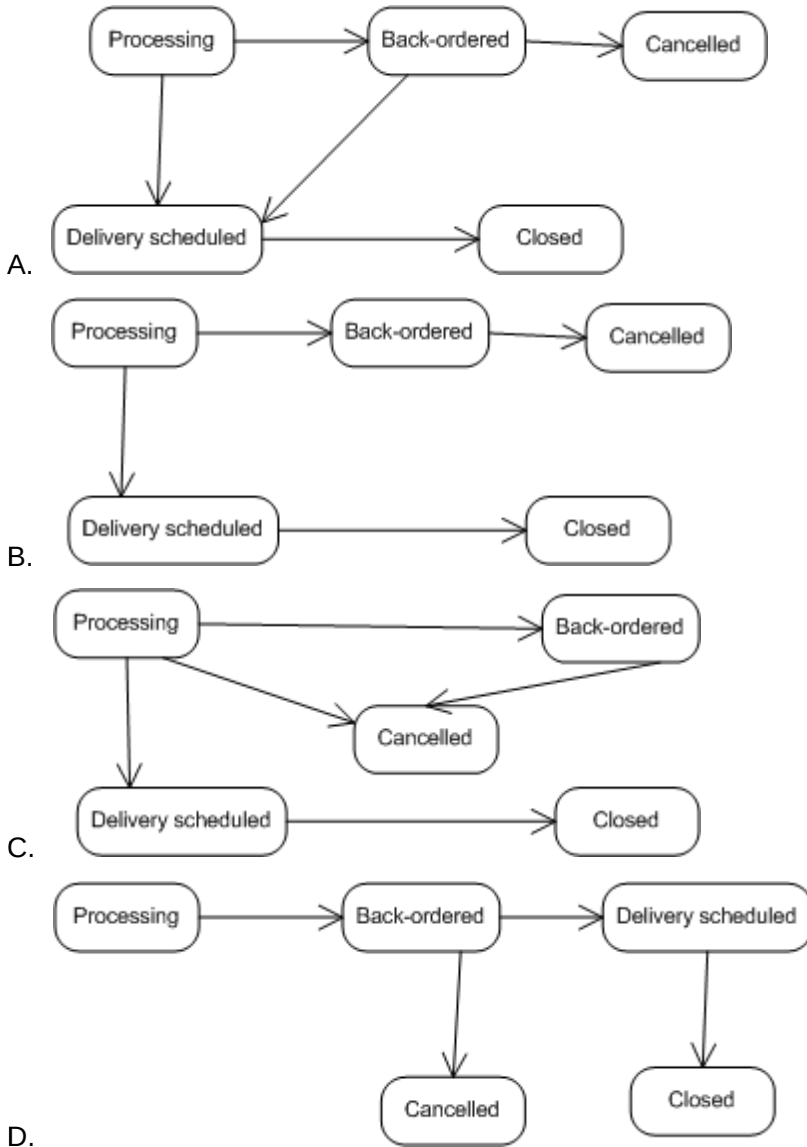
The application must meet the following requirements:

- The order is scheduled for delivery if all products are available
- The order is bac-ordered if any one product is not available.

- The customer can cancel the back-ordered order.
- The order is scheduled for delivery if the customer does not cancel it
- The order is closed after delivery

You need to select the state diagram that translates the requirements.

Which diagram should you choose?



Answer: A

7. You are an enterprise application developer. You create an application that has three layers:

- Layer 1 contains the Microsoft Windows client and the input validation logic
- Layer 2 contains business entities, business workflows, and business rules.
- Layer 3 contains the data access classes and stored procedures

You need to analyze the layers and identify dependencies that exist between these layers.

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

- A. Layer 1 depends on Layer 2.
- B. Layer 3 depends on Layer 1.
- C. Layer 2 depends on Layer 3.
- D. Layer 1 depends on Layer 3.
- E. Layer 2 depends on Layer 1.

Answer: A AND C

8. You are an enterprise application developer. You are creating a human resource application.

You identify the following relationships between the business objects:

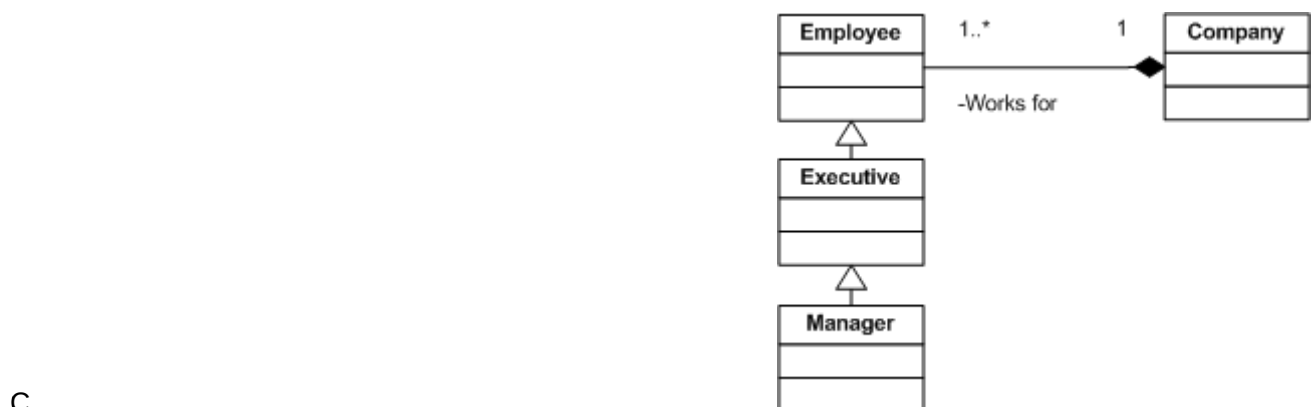
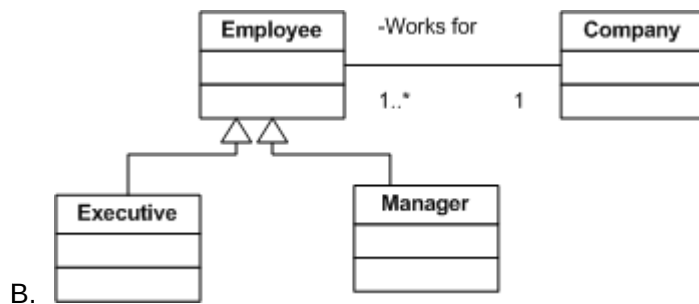
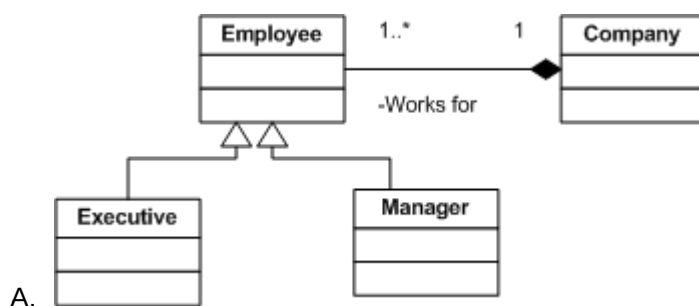
▣ A manager is an employee

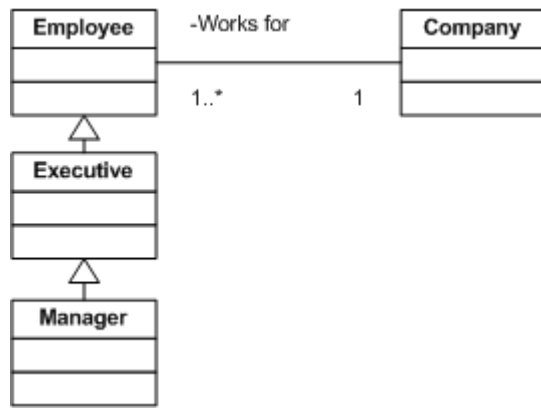
▣ An executive is an employee

▣ An employee works for a company

You need to translate only these relationships into a class diagram.

Which diagram should you choose?





D.

Answer: B

9. You are an enterprise application developer. You are designing an application. The database for the application currently has a one-to-one relationship between order and product.

The application must meet the following business requirements:

- ▣ An order must contain orders for many products
- ▣ An order must store the ordered quantity of each product

You need to evaluate the existing design and recommend changes to meet the business requirements.

Which two changes should you recommend? (Each correct answer presents a complete solution. Choose two.)

- A. Change the relationship between order and product to one-to-many.
- B. Change the relationship between order and product to many-to-many.
- C. Create a new table named Order line. Establish a one-to-many relationship between order and Order line and a one-to-one relationship between product and Order line.
- D. Create a new table named Order line. Establish a one-to-many relationship between order and Order line and a one-to-many relationship between product and Order line.

Answer: B AND D

10. You are an enterprise application developer. You are evaluating a database design for a human resource application. The existing database schema meets the following criteria:

- ▣ The database has an Employee table
- ▣ The Employee table has an Employee ID field and several other fields

You must accommodate the following new requirements:

- ▣ Employees are either supervisors or line workers
- ▣ A supervisor will supervise zero or more line workers
- ▣ An employee will be supervised by only one supervisor

A database administrator suggests creating a table named Supervisor and copying the supervisor data from the Employee table to the new table. The database administrator also wants to create a foreign key in the Supervisor table to reference the Employee table.

You need to evaluate the suggested change to ensure that there is minimal impact on the existing database schema.

What should you conclude?

- A. The suggested schema change will meet the requirements.
- B. The suggested schema change will not meet the requirements. Recommend creating a table named Supervisor and copying the supervisor data from the Employee table to the new table. Create a foreign key in the Employee table to reference the Supervisor table.
- C. The suggested schema change will not meet the requirements. Recommend creating a column named SupervisorID in the Employee table to reference the supervisor for an employee. Create a foreign key between this column and the Employee table.
- D. The suggested schema change will not meet the requirements. Recommend creating a column named LineWorkerID in the Employee table to reference the line worker for a supervisor. Create a foreign key between this column and the Employee table.

Answer: C

11. You are an enterprise application developer. You are designing a Web-based application to maintain appointment details.

You consider implementing the following steps to delete an appointment:

- Enter a date range or a client ID, or enter a date range and a client ID to get a list of appointments.
- Click the Appointment hyperlink. The appointment details are retrieved and displayed
- Click the Delete button

You need to analyze the requirements and recommend stored procedures.

Which three stored procedures should you recommend? (Each correct answer presents part of the solution. Choose three.)

- A. Search for appointments by using client ID.
- B. Search for appointments by using date range.
- C. Search for appointments by using client ID and date range.
- D. Verify if an appointment exists.
- E. Retrieve an appointment.
- F. Retrieve and delete an appointment.
- G. Delete an appointment.

Answer: C AND E AND G

12. You are an enterprise application developer. You are creating a three-tier application. The business layer contains 10 business functions. These business functions write messages to message queues and update records in a Microsoft SQL Server database.

You need to identify the transaction mechanism for these business functions to group both the activities together as one atomic transaction unit.

Which transaction mechanism should you choose?

- A. ADO.NET transaction
- B. T-SQL transaction
- C. COM+ transaction
- D. ASP.NET transaction

Answer: C

13. You are an enterprise application developer. You are evaluating a component that monitors a Web-based application.

The component stores monitoring information in a database and performs the following functions:

Retrieves the number of orders placed per second.

Tracks the data for peak usage of the application and displays the data in a tabular form.

Subsequently, monitoring requirements change in the following manner:

Users must be able to view data graphically.

Users must be able to analyze data in real time.

Users must be able to correlate the number of orders placed per second with the memory usage in the Web server.

You need to evaluate whether the component meets the new requirements and propose a solution, if required.

What should you conclude?

- A. The component meets the new requirements.
- B. The component does not meet the new requirements. You need to update a text file by using trace statements instead of storing data in a database.
- C. The component does not meet the new requirements. You need to update a custom performance counter instead of a database.
- D. The component does not meet the new requirements. You need to update a custom event log instead of a database.

Answer: C

14. You are an enterprise application designer. You are designing a three-tier enterprise application. The application currently consists of a business layer and a data layer.

The application must perform the following tasks:

Support a smart client interface and a Web client interface.

Achieve maximum reuse between the smart client interface and the Web client interface.

Reduce code duplication.

The systems analyst recommends adding a UI layer to perform the required tasks.

You need to evaluate this recommendation.

What should you conclude?

- A. Adding a UI layer will meet the requirements.
- B. Adding a UI layer will not meet the requirements. Recommend adding a UI process layer.
- C. Adding a UI layer will not meet the requirements. Recommend adding a service layer.
- D. Adding a UI layer will not meet the requirements. Recommend adding a business workflow layer.

Answer: B

15. You are an enterprise application developer. You are designing an intranet Web application.

This application must meet the following requirements:

The employees must log on to use the application.

The database authentication mechanism must be as secure as possible.

The number of connection pools must be minimized.

You decide to use Microsoft SQL Server authentication and a specific SQL Server account.

You need to evaluate whether the design will meet the business requirements and make recommendations, if required.

What should you conclude?

- A. The design meets the requirements.
- B. The design does not meet the requirements. Use Windows Authentication with a specific Windows account.
- C. The design does not meet the requirements. Use SQL Server authentication and the credentials of the logged on user.
- D. The design does not meet the requirements. Use Windows Authentication with the Windows account of the logged on user.

Answer: B

16. You are an enterprise application developer. You are evaluating the physical design of a Web-based application. Fifty customers will use the application from different regions.

The use of the application will trigger events of different severities. These events must be logged, extracted, and then filtered on the basis of customer, region, or severity of events. The event details also must be persisted, backed up, and archived for later retrieval.

The development team plans to use an event log for logging events. On evaluation, you find the plan does not meet the requirements.

You need to explain why an event log fails to meet the requirements.

What should you conclude?

- A. Event logs cannot track custom application events.
- B. Event logs cannot be filtered to meet the requirements.
- C. Event logs cannot be backed up or archived.
- D. Event logs cannot be persisted and will be deleted when the Web server shuts down.

Answer: B

17. You are an enterprise application developer. Your company has a Web-based application that runs on a single Web server. Session information is currently being stored by using the default session mode. You are redesigning the application to run in a Web farm. You must ensure that the failure of any single server does not make session information unavailable. A developer in your team recommends using the default session mode on each server in the Web farm.

You need to evaluate this recommendation.

What should you conclude?

- A. The recommended solution meets the requirements.
- B. The recommended solution does not meet the requirements. Store the session information in a separate state process on each Web server in the Web farm.
- C. The recommended solution does not meet the requirements. Store the session information in a separate state process on a dedicated session state server.
- D. The recommended solution does not meet the requirements. Store the session information in a Microsoft SQL Server failover cluster.

Answer: D

18. You are an enterprise application developer. You are designing a Microsoft Windows-based application that will use a third-party library. The third-party library is available in a single assembly. The library contains classes inside the Com.Util namespace. You can access the source code for this library.

You must provide additional functionality that is not available in the third-party library. To conform to corporate policy, the additional functionality must be available in the Com.Util namespace.

A developer in your team decides to implement the additional functionality by modifying the source code of the third-party library.

You need to evaluate whether this implementation simplifies maintenance when new versions of the third-party library are released.

What should you conclude?

- A. The current implementation satisfies the requirements.
- B. The current implementation does not satisfy the requirements. You need to create partial classes inside the third-party library for the extra functionality. Compile the partial classes as a single assembly and use

it in the application.

C. The current implementation does not satisfy the requirements. You need to create a separate assembly and create classes inside the Com.Util namespace. Use this assembly along with the third-party library assembly in the application.

D. The current implementation does not satisfy requirements. You need to create partial classes in a separate assembly for the classes in the third-party library assembly. Use the separate assembly along with the third-party library assembly in the application.

Answer: C

19. You are an enterprise application developer.

Your company operates a Microsoft Windows-based client application. The application is deployed to 50 client computers on the network. The application uses a separate class library as a data access layer. The data access layer is currently deployed to the application folder of the client application.

It is time consuming to deploy new versions of the data access layer.

You need to evaluate the current physical design of the application and recommend changes to speed up deployment of new versions of the data access layer.

What should you recommend?

A. Deploy the data access layer component to the global assembly cache of a server on the network.

B. Deploy the data access layer component to the Windows system folder. Use a <codeBase> tag in the Windows-based client application configuration file to point to the deployed library.

C. Deploy a copy of the data access layer component to the global assembly cache along with each instance of the Windows-based client application.

D. Deploy the data access layer component to a server on the network. Use a <codeBase> tag in the Windows-based client application configuration file to point to the deployed library.

Answer: D

20. 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:

- oAdd support for additional data stores, including network storage.

- oAcquire 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