



VKU_Phân tích thiết kế hệ thống_Đề thi cuối kì

VKU_Phân tích thiết kế hệ thống (Trường Đại học Công nghệ Thông tin và Truyền thông
Việt - Hàn)

Bắt đầu vào lúc	Thứ Sáu, 17 Tháng Mười Hai 2021, 7:51 SA
Trạng thái	Đã xong
Kết thúc lúc	Thứ Sáu, 17 Tháng Mười Hai 2021, 8:29 SA
Thời gian thực hiện	38 phút 18 giây
Điểm	23,00/40,00
Điểm	5,75 trên 10,00 (58%)

Câu hỏi 1

Hoàn thành

Đạt điểm 0,00 trên 1,00

What are the properties of a good system? *

☐ a. Minimising coupling between modules and minimising coupling within modules.

☐ b. Maximising coupling between modules and maximising coupling within modules.

☐ c. Maximising coupling between modules and minimising coupling within modules.

☒ d. Minimising coupling between modules and maximising coupling within modules.

Câu hỏi 2

Hoàn thành

Đạt điểm 1,00 trên 1,00

What are the NOT disadvantages of the functional approach?

☐ a. The system is weakly open when applying functional-oriented approach.

☐ b. Structure of the system is defined based on the functions, therefore a change of functions will cause difficulties in change of the structure.

☒ c. It is very difficult to apply.

☐ d. In a function-oriented approach, functions are separated from data.

Câu hỏi 3

Hoàn thành

Đạt điểm 1,00 trên 1,00

Which statement is TRUE about attributes? *

☐ a. They are always private.

☒ b. Their values can be changed from object to object of the same class.

☐ c. They can implement some computations.

☐ d. They cannot be changed after the object is created.

Câu hỏi 4

Hoàn thành

Đạt điểm 1,00 trên 1,00

Which is NOT one of three special events associated with state transition?

☐ a. Entry.

☐ b. Do.

☐ c. Exit.

☒ d. Act.

Câu hỏi 5

Hoàn thành

Đạt điểm 1,00 trên 1,00

The combination of data and functions into a single unit is known as ...

☒ a. Encapsulation.

☐ b. Abstraction

☐ c. Inheritance

☐ d. Polymorphism

Câu hỏi 6

Hoàn thành

Đạt điểm 1,00 trên 1,00

Fill in the blank: _____ shows how a software system will be physically deployed in the hardware environment

☐ a. Class diagram

☐ b. Use case diagram

☒ c. Deployment diagram

☐ d. Component diagram

Câu hỏi 7

Hoàn thành

Đạt điểm 1,00 trên 1,00

Which of the following answers describes the state of the object in an object-oriented approach?

☐ a. State is a set of functions.

☐ b. At every moment, state has a value in a specific set of attributes.

☒ c. State (data) describes the characteristics of an object at a given time, and is saved in the variables.

☐ d. State describes one property of the object.

Câu hỏi 8

Hoàn thành

Đạt điểm 1,00 trên 1,00

An object with multiple forms is referred to as a ...

☐ a. Abstract class

☐ b. Inheritance

☒ c. Polymorphism

☐ d. Interface

Câu hỏi 9

Hoàn thành

Đạt điểm 1,00
trên 1,00

Which of the following statements is TRUE?

- ☒ a. Design class diagram can be developed by basing on analysis class diagram.
- ☐ b. Analysis class diagram has all attributes and operations of all classes.
- ☐ c. Analysis class diagram can be built by basing on design class diagram.
- ☐ d. Analysis class diagram cannot have composition and aggregation relationships.

Câu hỏi 10

Hoàn thành

Đạt điểm 0,00
trên 1,00

Fill in the blank: _____ is a run-time physical object that represents a computational resource in deployment diagram.

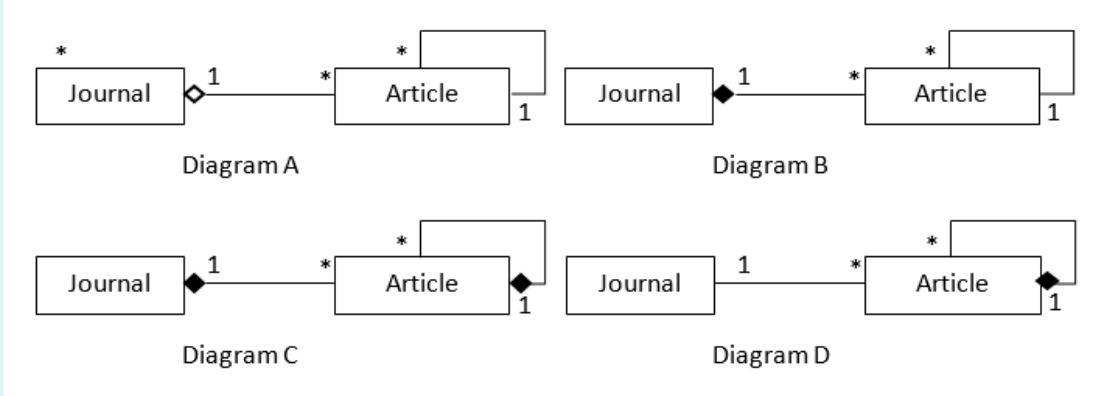
- ☐ a. Deployment
- ☒ b. Component
- ☐ c. Node
- ☐ d. Object

Câu hỏi 11

Hoàn thành

Đạt điểm 0,00
trên 1,00

Journal has many articles. An article can refer to many other articles. Choose the best class diagram modeling the statement above. *



- ☐ a. Diagram D
- ☒ b. Diagram C
- ☐ c. Diagram A
- ☐ d. Diagram B

Câu hỏi 12

Hoàn thành

Đạt điểm 1,00
trên 1,00

A programming paradigm that combines instructions and data into objects.

- ☒ a. Object-oriented programming
- ☐ b. Logic programming
- ☐ c. Reactive programming
- ☐ d. Procedural programming

Câu hỏi 13

Hoàn thành

Đạt điểm 0,00
trên 1,00

A company has many employees. An employee can work for many companies. What is the relationship between two classes “Employee” and “Company”?

- ☐ a. Inheritance
- ☒ b. Composition
- ☐ c. Aggregation
- ☐ d. Dependency

Câu hỏi 14

Hoàn thành

Đạt điểm 1,00
trên 1,00

Which of the following statements is the best answer regarding to modeling?

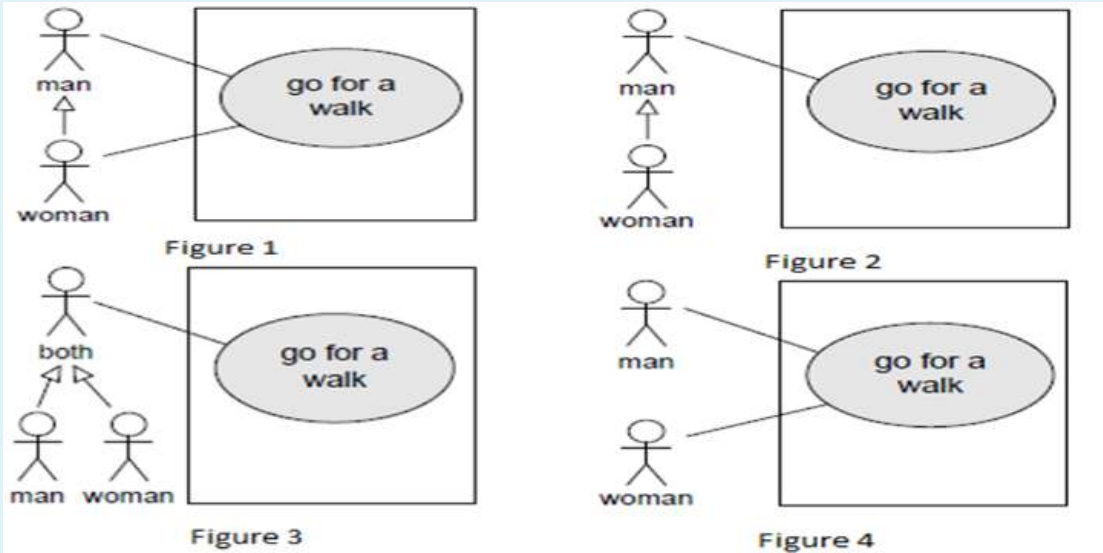
- ☐ a. Modeling is the process of defining system objects.
- ☐ b. Modeling allows us to specify the system architecture.
- ☐ c. Modeling allows us to define solutions to the system.
- ☒ d. Modeling is the process of building models to represent a system.

Câu hỏi 15

Hoàn thành

Đạt điểm 1,00
trên 1,00

How do you model the following situation with a use case diagram? “A man and a woman go for a walk.”



- ☒ a. Figure 4
- ☐ b. Figure 1
- ☐ c. Figure 3
- ☐ d. Figure 2

Câu hỏi 16

Hoàn thành
Đạt điểm 0,00
trên 1,00

In ATM system, when account holders forget their password, they can change their password. Which of the following relationship between “Forget password” and “Change password” is TRUE?



- ☒ a. <<extend>> with an open arrowhead from “Forget password” to “Change password”
- ☐ b. <<include>> with an open arrowhead from “Forget password” to “Change password”
- ☐ c. <<extend>> with an open arrowhead from “Change password” to “Forget password”
- ☐ d. <<include>> with an open arrowhead from “Change password” to “Forget password”

Câu hỏi 17

Hoàn thành
Đạt điểm 0,00
trên 1,00

A company belongs to only a group. Which is the relationship between two classes “Company” and “Group”?

- ☐ a. Aggregation
- ☐ b. Dependency
- ☐ c. Composition
- ☒ d. Association

Câu hỏi 18

Hoàn thành
Đạt điểm 1,00
trên 1,00

What are main types of responsibility of class/object?

- ☒ a. Know and Do
- ☐ b. Do and Implementation
- ☐ c. Implementation and Know
- ☐ d. Realization and Inheritance

Câu hỏi 19

Hoàn thành
Đạt điểm 1,00
trên 1,00

While employees work at office, many employees share the same room. What is the relationship between two classes “Employee” and “Room”?

- ☐ a. Composition
- ☒ b. Association
- ☐ c. Dependency
- ☐ d. Inheritance

Câu hỏi 20

Hoàn thành
Đạt điểm 0,00
trên 1,00

Which of the following statements is FALSE?

- ☐ a. During object-oriented analysis, there is an emphasis on finding and describing object or concepts in the problem domain.
- ☐ b. Analysis is the process of investigating to find a solution to a problem.
- ☐ c. Analysis is the stage of defining the conceptual model
- ☒ d. Analysis emphasizes an investigation of the problem and requirements, rather than a solution.

Câu hỏi 21

Hoàn thành
Đạt điểm 0,00
trên 1,00

Fill in the blank: A _____ shows the configuration of the run-time processing nodes and the software components that live on them.

- ☐ a. use case diagram
- ☐ b. deployment diagram
- ☒ c. component diagram
- ☐ d. class diagram

Câu hỏi 22

Hoàn thành
Đạt điểm 0,00
trên 1,00

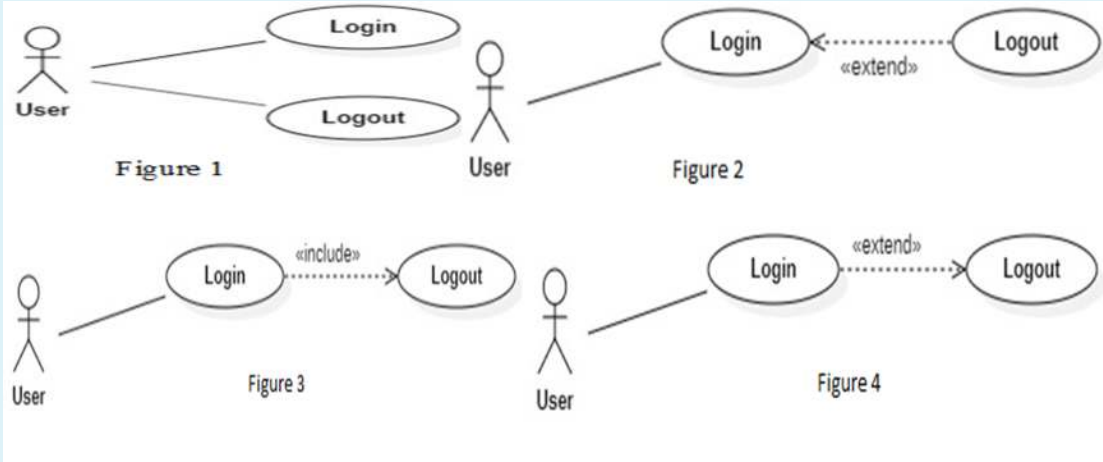
What is NOT the benefit of low coupling? *

- ☐ a. Lower dependency between the classes.
- ☐ b. Change in one class having a lower impact on other classes.
- ☒ c. You can easily make changes to the internals of modules within worrying about their impact on other modules in the system.
- ☐ d. A class with high (or strong) coupling relies on many other classes.

Câu hỏi 23

Hoàn thành
Đạt điểm 0,00
trên 1,00

Which of the following diagram is TRUE?



- ☒ a. Figure 4
- ☐ b. Figure 3
- ☐ c. Figure 1
- ☐ d. Figure 2

Câu hỏi 24

Hoàn thành
Đạt điểm 1,00
trên 1,00

Which statement is TRUE regarding to distinction between the activities in the activity diagram and the operations in the static structure?

- ☐ a. An activity describes an operation.
- ☒ b. Activities are carried out by the system or the actors, whilst operations are related to classes.
- ☐ c. Operations are carried out by the system or the actors, whilst activities are related to classes.
- ☐ d. An operation describes an activity.

Câu hỏi 25

Hoàn thành
Đạt điểm 0,00
trên 1,00

Which of the following statements is TRUE?

- ☒ a. The use case diagram specifies the functional decomposition of a system.
- ☐ b. The use case diagram models the time flow within a system.
- ☐ c. The use case diagram is a typical interaction or a typical sequence of interactions between the system and its environment.
- ☐ d. The use case diagram specifies who/role/another system which performs the tasks of the system that is going to be developed.

Câu hỏi 26

Hoàn thành
Đạt điểm 1,00
trên 1,00

Which of the following is a valid name of actor?

- ☐ a. student().
- ☐ b. To enroll.
- ☒ c. Student.
- ☐ d. To enroll student.

Câu hỏi 27

Hoàn thành
Đạt điểm 1,00
trên 1,00

Which statement of the following is TRUE regarding to a component diagram?

- ☐ a. It is a static picture of the organization of the system and describes the information flows in the system.
- ☐ b. It describes the information flows in the system and models a dynamic view of the system.
- ☐ c. It models the dynamic view of the system and describes the organization of the different components of the system.
- ☒ d. It describes the organization of the different components of the system and is a static view of the organization of the system.

Câu hỏi 28

Hoàn thành
Đạt điểm 1,00
trên 1,00

Which of the following statements is TRUE regarding to use cases?

- ☐ a. Use cases are suitable for modeling interfaces between two systems.
- ☐ b. Use cases specify the procedural process within a system.
- ☒ c. Use cases specify the functionalities and the behavior that the system which is being developed should have.
- ☐ d. Use cases are non-functional requirement.

Câu hỏi 29

Hoàn thành
Đạt điểm 1,00
trên 1,00

Which statement is CORRECT regarding to modelling?

- ☐ a. Modelling is an abstraction of systems.
- ☐ b. Modelling is a simplification of reality. We build models so we can better understand the system we are developing.
- ☐ c. Modelling is a structure or behavior of the system.
- ☒ d. Modelling is the process of building models to represent a system.

Câu hỏi 30

Hoàn thành
Đạt điểm 1,00
trên 1,00

Which statement is TRUE regarding to state diagram?

- ☐ a. State diagram focus on the behavior of actors, ordered by events.
- ☒ b. State diagram focus on the behavior of objects, ordered by events.
- ☐ c. State diagram focus on the behavior of use cases, ordered by actors.
- ☐ d. State diagram focus on the behavior of classes, ordered by objects.

Câu hỏi 31

Hoàn thành

Đạt điểm 1,00
trên 1,00

Which of following is TRUE regarding to activity diagram?

- ☒ a. An activity diagram is a behavioral diagram.
- ☐ b. An activity diagram is a static diagram.
- ☐ c. An activity diagram is an interaction diagram.
- ☐ d. An activity diagram is a communication diagram.

Câu hỏi 32

Hoàn thành

Đạt điểm 1,00
trên 1,00

Which design pattern is the code snippet below implementing?

```
1 class TrafficLightOperator {
2     List<TrafficLights> lights;
3
4     public void attachLight(TrafficLight light) {
5         lights.add(lights);
6     }
7
8     public void turnRed() {
9         for (light : lights) {
10             light.turnRed();
11         }
12         updateAll();
13     }
14
15     public void updateAll() {
16         for (light : lights) {
17             light.update();
18         }
19     }
20 }
```

- ☒ a. Observer pattern
- ☐ b. Singleton pattern
- ☐ c. Composite pattern
- ☐ d. Adapter pattern

Câu hỏi 33

Hoàn thành

Đạt điểm 0,00
trên 1,00

Which of the following statements relates to software portability in non-functional requirements?

- ☐ a. It cannot be enhanced by using languages, OS and tools that are universally available and standardized.
- ☒ b. It is a degree to which software running on one platform can easily be converted to run on another platform.
- ☒ c. None of the mentioned.
- ☐ d. The ability of the system to behave consistently in a user-acceptable manner when operating within the environment for which the system was intended.

Câu hỏi 34

Hoàn thành

Đạt điểm 0,00
trên 1,00

Which statement of the following is FALSE regarding to an object diagram?

- ☐ a. It represents the same information as a class diagram but at the instance level of classes;
- ☒ b. It describes a set of objects and their relationships;
- ☒ c. It is very important to understand the functions of the system.
- ☐ d. It describes the static view of the system

Câu hỏi 35

Hoàn thành

Đạt điểm 0,00
trên 1,00

Which are the Object-oriented modeling techniques?

- ☐ a. OMT (Object Modeling Technique); OOP (Object-Oriented Programming); OOD (Object-Oriented Design).
- ☒ b. OOP (Object-Oriented Programming); OOD (Object-Oriented Design); OOSE (Object-Oriented Software Engineering).
- ☐ c. OOD (Object-Oriented Design); OOSE (Object-Oriented Software Engineering); OMT (Object Modeling Technique).
- ☒ d. OOSE (Object-Oriented Software Engineering); OMT (Object Modeling Technique); OOP (Object-Oriented Programming).

Câu hỏi 36

Hoàn thành

Đạt điểm 0,00
trên 1,00

Which of the following elements is not used to describe a design pattern?

- ☐ a. Consequences
- ☐ b. Solution
- ☒ c. Lines of code
- ☒ d. Problem

Câu hỏi 37

Hoàn thành

Đạt điểm 0,00
trên 1,00

Which of the following design patterns belongs to the Structural patterns catalog? *

- ☐ a. Observer pattern
- ☒ b. Composite pattern
- ☒ c. Template Method pattern

Câu hỏi 38

Hoàn thành

Đạt điểm 0,00
trên 1,00

☐ d. Factory Method pattern

Which design pattern attaches additional responsibilities to an object dynamically? *

☐ a. Singleton pattern

☐ b. State pattern

☒ c. Decorator pattern

☒ d. Template Method pattern

Câu hỏi 39

Hoàn thành

Đạt điểm 1,00
trên 1,00

Fill in the blank: Activity diagrams can be used to determine which to add to class diagrams.

☐ a. Activities.

☐ b. Attributes.

☐ c. Relationships.

☒ d. Operations.

Câu hỏi 40

Hoàn thành

Đạt điểm 1,00
trên 1,00

What are two transition types of a state diagram?

☐ a. System transition and object transition.

☒ b. Internal transition and external transition.

☐ c. Transition between states and transition between activities.

☐ d. Transition between events and transition between activities.

◀ Các thông báo

Chuyển tới...

