

**Started on** Tuesday, 29 November 2022, 3:21 PM

**State** Finished

**Completed on** Tuesday, 29 November 2022, 3:30 PM

**Time taken** 8 mins 39 secs

**Grade** 5.00 out of 10.00 (50%)

## Question 1

Incorrect

Mark 0.00 out of 1.00

Which of the following about class diagrams in a design document is correct?

Select one:

- ☐ a. In a system that interacts with end-users, boundary/view classes must be designed.
- ☒ b. Each kind of the classes such as entity/model, boundary/view and controller is provided in a separated [class diagram](#). ✖
- ☐ c. All the other answers are correct.
- ☐ d. May need only an entity [class diagram](#)

The correct answer is: In a system that interacts with end-users, boundary/view classes must be designed.

## Question 2

Correct

Mark 1.00 out of 1.00

In the following description, which object classes can be defined? "The book management system needs to manage information about book including name, year of publishing, number of pages, publisher, and authors. Notes that, a publisher may publish many book; a book can be written by many authors and an author may write many books."

Select one:

- ☒ a. Book, Publisher, Author. ✔
- ☐ b. Book, YearOfPublishing, NumberOfPage, Publisher, Author.
- ☐ c. Book, NameOfBook, YearOfPublishing, NumberOfPage, Publisher, Author.
- ☐ d. All the other answers are correct.

The correct answer is: Book, Publisher, Author.

## Question 3

Correct

Mark 1.00 out of 1.00

Which of the following about diagrams in a design document is correct?

Select one:

- ☒ a. All the other answers are correct. ✓
- ☐ b. Class diagrams show descriptions about classes and their relationships.
- ☐ c. Class diagrams describe attributes and methods to implement the system.
- ☐ d. Sequence diagrams (if any) show interactions between system components.

The correct answer is: All the other answers are correct.

## Question 4

Incorrect

Mark 0.00 out of 1.00

Which of the following about class diagrams in a design document is NOT quite correct?

Select one:

- ☐ a. Need examples of using classes.
- ☐ b. Need the descriptions of all attributes.
- ☒ c. May need descriptions about the classes. ✗
- ☐ d. Need the descriptions of all methods.

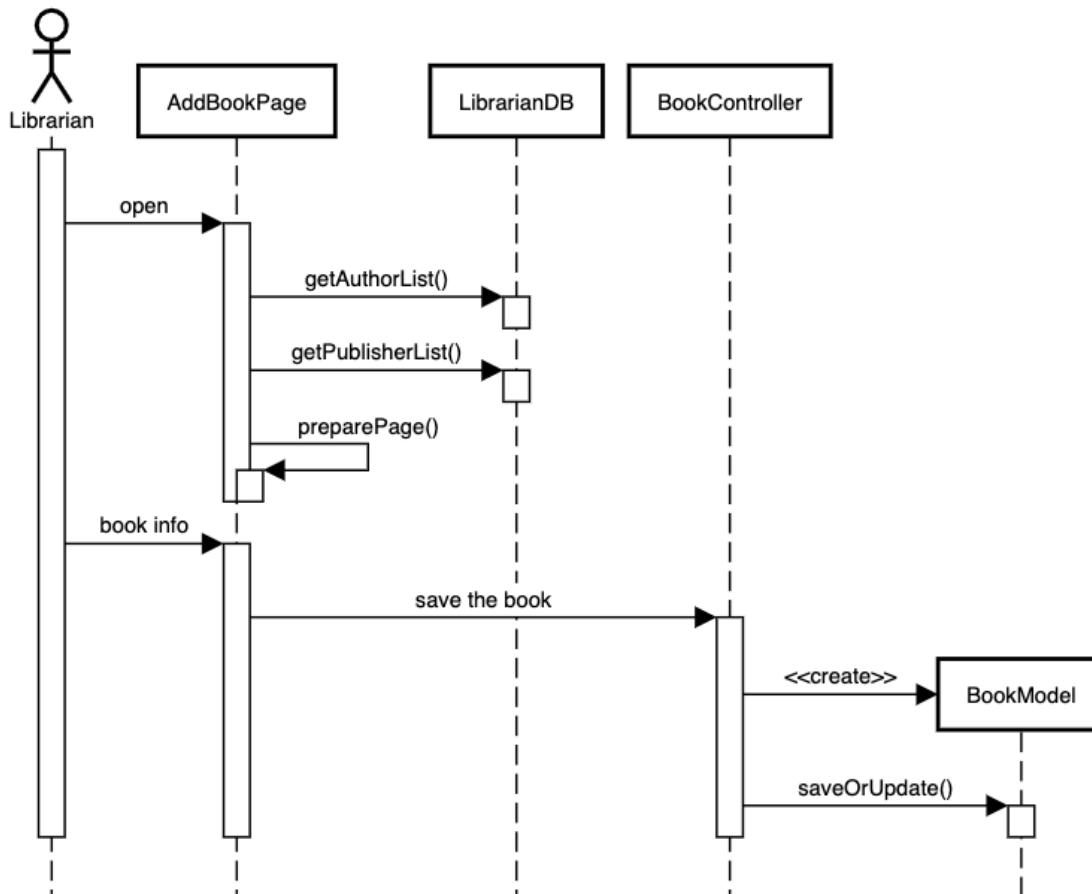
The correct answer is: Need examples of using classes.

## Question 5

Incorrect

Mark 0.00 out of 1.00

In the [sequence diagram](#) in Fig7.1.2.1, which of the following is INCORRECT?



Select one:

- ☒ a. All component names must be in format "[object]:Component" such as ":LibrarianDB", "bm:BookModel". ✖
- ☐ b. On opening, the AddBookPage calls getAuthorList and getPublisherList methods from the class LibrarianDB before calling its own method preparePage.
- ☐ c. The Librarian triggers the [sequence diagram](#).
- ☐ d. The message "save the book" is good definition of an operation at design level.

The correct answer is: The message "save the book" is good definition of an operation at design level.

## Question 6

Correct

Mark 1.00 out of 1.00

Which of the following in software detail design is INCORRECT?

Select one:

- ☐ a. A detail design document includes all classes and their methods.
- ☒ b. Each table in the database needs at least one corresponding class in the software. ✓
- ☐ c. Class methods shall be described clearly (such that they can be implemented correctly).
- ☐ d. There is possibly some classes that have no methods.

The correct answer is: Each table in the database needs at least one corresponding class in the software.

## Question 7

Correct

Mark 1.00 out of 1.00

Which of the following comparing [sequence diagram](#) in software specification and design is correct?

Select one:

- ☐ a. There may be no actor.
- ☐ b. In design, the "internal components" in a [sequence diagram](#) are classes/objects.
- ☐ c. In specification, the interactions in a [sequence diagram](#) are usually general operations, not detail class methods as in detailed design.
- ☒ d. All the other answers are correct. ✓

The correct answer is: All the other answers are correct.

## Question 8

Incorrect

Mark 0.00 out of 1.00

In the following description, which object classes can be defined? "The university is going to build a smart campus system (SCAMS) to make the university smart. In 2019, the system is for the lecture halls, to control the doors, lights, fans, sound systems, projectors, and camera automatically based on the room schedule and the detecting of human."

Select one:

- ☐ a. All object classes from the other answers.
- ☐ b. Door, Light, Fan, SoundSystem, Projector, Camera.
- ☒ c. LectureHall, Door, Light, Fan, SoundSystem, Projector, Camera, RoomSchedule, HumanDetectingService. ✗
- ☐ d. LectureHall, Door, Light, Fan, SoundSystem, Projector, Camera, RoomSchedule.

The correct answer is: LectureHall, Door, Light, Fan, SoundSystem, Projector, Camera, RoomSchedule.

## Question 9

Incorrect

Mark 0.00 out of 1.00

Which of the following about diagrams in a design document is INCORRECT?

Select one:

- ☐ a. Activity diagrams may be provided to represent the activities of (part of) the system.
- ☐ b. Collaboration diagrams should be accompanied by sequence diagrams.
- ☐ c. Sequence diagrams must be provided to represent interactions between components.
- ☒ d. State-chart diagrams may be provided to represent states and the state transitions. ✖

The correct answer is: Collaboration diagrams should be accompanied by sequence diagrams.

## Question 10

Correct

Mark 1.00 out of 1.00

Which of the following about state diagram in software design is INCORRECT?

Select one:

- ☒ a. We have to provide a state diagram for all of the objects in the system. ✔
- ☐ b. Used to show how objects respond to different service requests and the state transitions triggered by these requests.
- ☐ c. Events on transitions have to be defined clearly.
- ☐ d. Are useful high-level models of a system or an object's run-time behavior.

The correct answer is: We have to provide a state diagram for all of the objects in the system.



#### WEBSITE

HCMUT

MyBK

BKSI

#### CONTACT

📍 268 Ly Thuong Kiet Street Ward 14, District 10, Ho Chi Minh City, Vietnam

☎ (028) 38 651 670 - (028) 38 647 256 (Ext: 5258, 5234)

✉ elearning@hcmut.edu.vn