

Status Finished**Started** Friday, 1 November 2024, 1:02 AM**Completed** Friday, 1 November 2024, 1:03 AM**Duration** 1 min 28 secs**Grade** 10.00 out of 10.00 (100%)**Question 1**

Complete

Mark 1.00 out of 1.00

Which of the following in software detail design is INCORRECT?

Select one:

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

Question 2

Complete

Mark 1.00 out of 1.00

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

Select one:

- ☐ a. May need only an entity class diagram
- ☐ 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. In a system that interacts with end-users, boundary/view classes must be designed.

Question 3

Complete

Mark 1.00 out of 1.00

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

Select one:

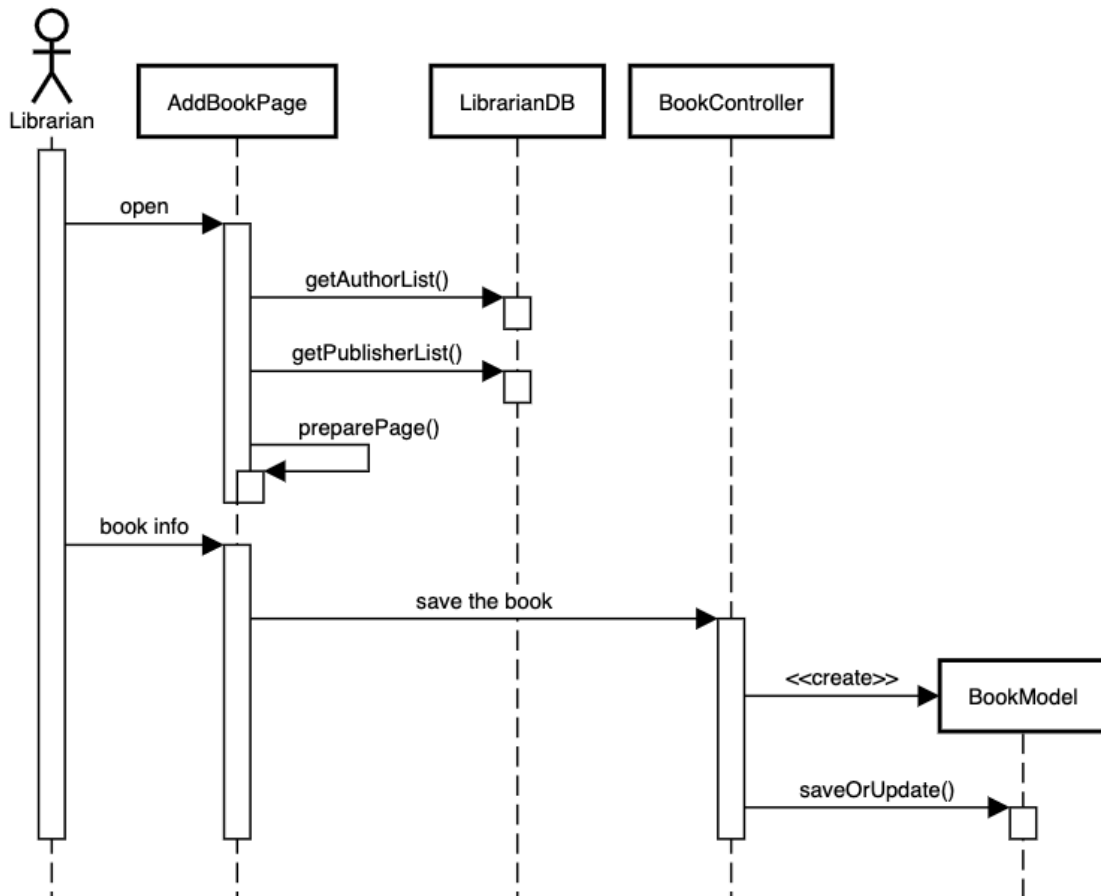
- ☐ a. Need the descriptions of all attributes.
- ☐ b. May need descriptions about the classes.
- ☐ c. Need the descriptions of all methods.
- ☒ d. Need examples of using classes.

Question 4

Complete

Mark 1.00 out of 1.00

In the sequence diagram in Fig7.1.2.1, which of the following is INCORRECT?



Select one:

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

Question 5

Complete

Mark 1.00 out of 1.00

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

Select one:

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

Question 6

Complete

Mark 1.00 out of 1.00

Which of the following comparing sequence diagram in software specification and design is correct?

Select one:

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

Question 7

Complete

Mark 1.00 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. LectureHall, Door, Light, Fan, SoundSystem, Projector, Camera, RoomSchedule, HumanDetectingService.
- ☒ c. LectureHall, Door, Light, Fan, SoundSystem, Projector, Camera, RoomSchedule.
- ☐ d. Door, Light, Fan, SoundSystem, Projector, Camera.



Question 8

Complete

Mark 1.00 out of 1.00

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

Select one:

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

Question 9

Complete

Mark 1.00 out of 1.00

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

Select one:

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

Question 10

Complete

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

