X

23dcs100@charusat.edu.in ⌄

NPTEL (https://swayam.gov.in/explorer?ncCode=NPTEL) » Software Engineering (course)

☰

If already registered, click to check your payment status

Course outline

About NPTEL ()

How does an NPTEL online course work? ()

Week 0 ()

Week 1 : ()

Week 2 : ()

Week 3 : ()

Week 4 : ()

Week 5 : ()

Week 6 : ()

Week 7 : ()

Week 7 : Assignment 7

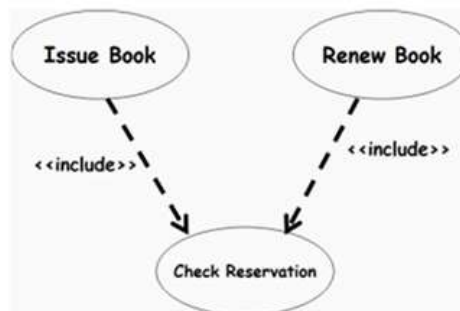**Your last recorded submission was on 2025-09-06, 09:37 Due date: 2025-09-10, 23:59 IST. IST**

1)   *1 point*

Consider the following use case factorization example. Which of the following assertions can be inferred from it?

a.   Issue book use case implicitly invokes Check reservation use case

b.   Issue book use case invokes Check reservation use case only if some conditions are satisfied

c.   Issue book and Renew book use cases are inter dependent

d.   This factorization helps in reducing duplication of code in the implementation

e.   The factorization helps in reducing the runtime complexity of the two use cases

☑ a.
☐ b.
☐ c.
☑ d.
☐ e.

2)   *1 point*

Which one of the following are **FALSE** about a use case?

    a. It is a way in which a system can be used by the users to achieve specific goals

    b. It corresponds to a non-functional requirement.

    c. It defines external behavior without revealing internal structure of system

    d. It is a set of related usage scenarios tied together by a common goal

    e. It states a future goal of the system

☐ a.
☑ b.
☐ c.
☐ d.
☑ e.

3)   *1 point*

UML 1.X was enhanced with additional notational support to largely address modelling which one of the following types of applications?

    a. Embedded computing applications

    b. Artificial intelligence applications

    c. Data science applications
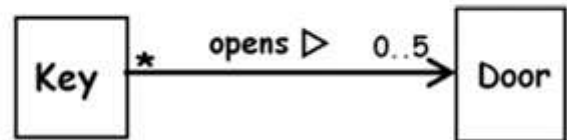
    d. Cloud applications

    e. Blockchain applications

◉ a.
○ b.
○ c.
○ d.
○ e.

4)   *1 point*

Session ()

Which one of the following is implied by the class diagram given below?

a. At least one key opens five doors

b. Many doors are opened by a key

c. Many doors are opened by up to 5 keys

d. A door is opened by up to 5 keys

e. A key opens up to 5 doors

○ a.
○ b.
○ c.
○ d.
◉ e.

5)   **1 point**

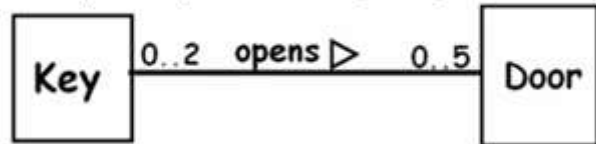Which of the following is implied by the class diagram given below?

a. Neither a Door object nor a Key object store attributes of each other

b. Either of a Door object or a Key object store attributes of the other

c. A reference of a Door object is stored as an attribute of a Key object and also a reference
   of a Key object is stored as an attribute of a Door object

d. A reference of a Door object is stored as an attribute of a Key object

e. A reference of a Key object is stored as an attribute of a Door object

○ a.
○ b.
○ c.
◉ d.
○ e.

6)   **1 point**

Which of the following is **NOT** implied by the class diagram given below?

| Key | 0..2 | opens ▷ | 0..5 | Door |

a. A Key opens up to 5 Doors

b. A Door is opened by up to 2 Keys

c. A Door is opened by up to 5 Keys

d. A Key may not open any of the Doors

e. Up to 2 Keys open up to 5 Doors

○ a.
○ b.
◉ c.
○ d.
○ e.

7)   *1 point*

Identification of the different categories of users in a use case diagram does **not** help towards which of the following?

a. Design of a suitable user interface

b. Design of a security and authentication mechanism

c. Design of a suitable user manual

d. Design of controller classes

e. Design of integration test plan

☐ a.
☐ b.
☐ c.
☑ d.
☑ e.

8)   *1 point*

How is an external system represented in a use case diagram?

      a. Using a specific icon available for this purpose

      b. Using text description

      c. Using object constraint language (OCL)

      d. By stereotyping the actor icon

      e. By using the symbol used to represent an object

○ a.
○ b.
○ c.
◉ d.
○ e.

9)   **1 point**

A library automation software is to be designed. A use case named **checkReservation** is needed to check whether a book has been reserved by any user. For the **issueBook** use case, before a book can be issued it needs to be checked whether the book has been reserved by any user. Which one of the following mechanisms is most appropriate to make the **issueBook** use case to include the **checkReservation** use case?
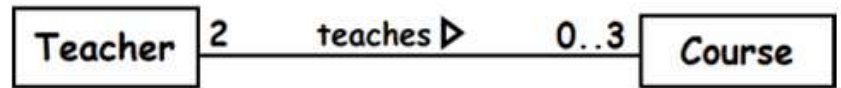
      a. Inheritance

      b. Dependency

      c. Include

      d. Extend

      e. Composition

○ a.
○ b.
◉ c.
○ d.
○ e.

10)   **1 point**

Which of the following are **NOT** implied by the class diagram given below?

| Teacher | 2 | teaches ▷ | 0..3 | Course |

a. Each course is jointly taught by two teachers

b. Each teacher teaches two courses

c. Some teachers may teach three course

d. Some teachers may not teach any course

e. Upto three Teachers can jointly teach exactly 2 Courses

- ☐ a.
- ☑ b.
- ☐ c.
- ☐ d.
- ☑ e.

You may submit any number of times before the due date. The final submission will be considered for grading.

Submit Answers