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Question 1

Partially correct

Mark 0.67 out of 1.00

(Exam, January 2014, question 3b)

Consider this system definition

An IT system to keep track of bicycles, their owners, and reports of stolen bicycles. The system shall increase the number of solved cases of bike theft by making information about bicycles and their insurance status, owners, and stolen bicycle reports available to the general public, insurance companies, the police, and municipal workers responsible for cleaning streets and bicycle parking lots.

The system is based on a centralized register with information about bicycles etc., and computers and mobile devices (tablets, smartphones) to register and search for information. All bicycles in the system will have barcode labels to supplement the mandatory frame number. The system must protect information about bicycle owners from unauthorized access.

Which of the following belong in the Problem Domain (PD), the Application Domain (AD) (or both) for the system

Bicycle thief	Neither PD nor AD	✓
Police officer	AD	✓
Citizen	AD	✓
Bicycle shop	Neither PD nor AD	✓
Smartphone	Neither PD nor AD	✗
Bicycle owner	Both PD and AD	✓
Bicycle	PD	✓
Label with barcode	Neither PD nor AD	✗
Insurance company	AD	✗

Your answer is partially correct.

You have correctly selected 6.

The correct answer is: Bicycle thief → Neither PD nor AD, Police officer → AD, Citizen → AD, Bicycle shop → Neither PD nor AD, Smartphone → AD, Bicycle owner → Both PD and AD, Bicycle → PD, Label with barcode → PD, Insurance company → Both PD and AD

Question 2

Correct

Mark 1.00 out of 1.00

(SAD exam June 2014, problem 3b)

A private school in Aalborg struggles with the administration of grades. Delays occur when teachers write the grades directly into each student's grade sheet (paper!), which is handed over from teacher to teacher.

The school wants to implement an IT based system to record grades. The system will administer teachers, students and grades. Grades are entered by teachers and parents can use it to view and sign off on student grades.

Which of the following are actors in the system?

Select one or more:

- ☐ a. The Ministry of Education
- ☒ b. Teacher ✓
- ☐ c. The school's homepage
- ☐ d. Grade sheets
- ☐ e. Student
- ☒ f. Parents ✓

Your answer is correct.

The correct answers are: Teacher, Parents

Question 3

Correct

Mark 1.00 out of 1.00

A use case ...

Select one or more:

- ☒ a. Describes a user's interaction with the system ✓
- ☐ b. Is a behavioral pattern
- ☐ c. Is an event trace
- ☒ d. Describes the interaction between the system and another system ✓
- ☐ e. Describes the actors using the system
- ☐ f. Is a special type of function

The correct answers are: Describes a user's interaction with the system, Describes the interaction between the system and another system

Question 4

Partially correct

Mark 0.50 out of 1.00

The purpose of the Procedural Pattern is to

Select one or more:

- ☐ a. Ensure business rules are observed
- ☐ b. Ensure that every action can be done almost in any order
- ☒ c. Describe usage ✓
- ☐ d. Describe behavior
- ☐ e. Describe structure

The correct answers are: Ensure business rules are observed, Describe usage

Question 5

Incorrect

Mark 0.00 out of 1.00

You can evaluate your actor and use case candidates by:

Select one or more:

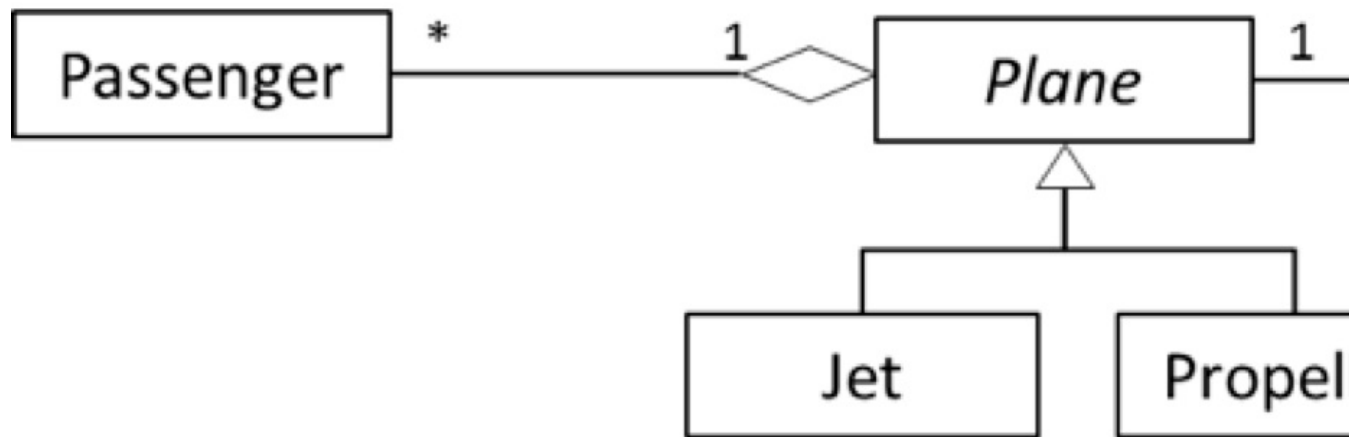
- ☐ a. Using prototypes mainly focusing on objects
- ☐ b. Evaluate social changes in the application domain
- ☒ c. Evaluate administrative changes in problem-domain ✗
- ☐ d. Reviewing the descriptions for mistakes and inconsistency
- ☐ e. Using prototypes mainly focusing on functions and interfaces

The correct answers are: Reviewing the descriptions for mistakes and inconsistency, Using prototypes mainly focusing on functions and interfaces, Evaluate social changes in the application domain

Question 6

Correct

Mark 1.00 out of 1.00



There is one object of the class pilot.

Select one or more:

- ☐ a. There is one object of the class 'Passenger'
- ☒ b. There is either one object of the class 'Jet' or one of the class 'Propeller' ✓
- ☒ c. There may be several objects of the class 'Passenger' ✓
- ☐ d. There is one object of the class 'Plane'
- ☐ e. There are two objects of the class 'Plane'
- ☐ f. There is one object of the class 'Jet'
- ☒ g. All passengers are indirectly connected to a pilot ✓
- ☐ h. There is one object of the class 'Propeller'

Your answer is correct.

There is one object of the class 'Pilot'.

Which of following statements are correct?

The correct answers are: There is either one object of the class 'Jet' or one of the class 'Propeller', All passengers are indirectly connected to a pilot, There may be several objects of the class 'Passenger'

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