Início	Terça, 14 de Janeiro de 2020 às 16:51
Estado	Prova submetida
Data de submissão:	Terça, 14 de Janeiro de 2020 às 16:51
Tempo gasto	11 segundos

Pergunta 1

Não respondida   Pontuação 1,000

[PROCESS] Regarding Acceptance Tests, they...

Selecione uma opção de resposta:

- ○ a. I do not wish to answer this question.
- ○ b. ...are, typically, defined by the development team and not by the customer.
- ○ c. ...allow confirming that the system has no bugs.
- ○ d. ...are used to validate that the developers accept the requirements.
- ○ e. ...allow validating that the system behaves according to what has been defined by the Product Owner.

A resposta correta é: ...allow validating that the system behaves according to what has been defined by the Product Owner.

Pergunta 2

Não respondida   Pontuação 1,000

[PROCESS] What is a Code Smell?

Selecione uma opção de resposta:

- ○ a. Code not working as it should.
- ○ b. I do not wish to answer this question.
- ○ c. A bug not yet found.
- ○ d. Code with syntax errors.
- ○ e. Poorly structured code.

A resposta correta é: Poorly structured code.

Pergunta 3

Não respondida   Pontuação 1,000

[PROCESS] When should you use Design Patterns?

Selecione uma opção de resposta:

- ○ a. When they fit naturally.
- ○ b. I do not wish to answer this question.
- ○ c. When yesterday's weather is tomorrow's weather
- ○ d. Always
- ○ e. Every time you do refactoring

A resposta correta é: When they fit naturally.

Pergunta 4

Não respondida   Pontuação 1,000

[PROCESS] Which of the following requirements is functional?

Selecione uma opção de resposta:

- ○ a. Authentication.
- ○ b. I do not wish to answer this question.
- ○ c. Security.
- ○ d. Performance.
- ○ e. Availability.

A resposta correta é: Authentication.

Pergunta 5

Não respondida   Pontuação 1,000

[PROCESS] In Planning Poker, what are the main steps to reach estimation?

Selecione uma opção de resposta:

- ○ a. Read, Bet, Estimate, Call.
- ○ b. I do not wish to answer this question.
- ○ c. Discuss, Estimate, Bet, Converge.
- ○ d. Read, Estimate, Discuss, Converge.
- ○ e. Read, Estimate, Discard, Converge.

A resposta correta é: Read, Estimate, Discuss, Converge.

Pergunta 6

Não respondida   Pontuação 1,000

[PROCESS] In SCRUM, which of the following best describes the roles of the Product Owner (PO) and the development team (DT)?

Selecione uma opção de resposta:

- ○ a. The DT must appoint a member as Scrum Master, that communicates with the Product Owner, and that is responsible for assigning tasks to the team members, control the quality of the work and solve code management problems during development.
- ○ b. Both PO and DT, together, define the product features, prioritize the User Stories and elaborate the Product Backlog.
- ○ c. The PO must assign the User Stories to the DT members at the beginning of each sprint.
- ○ d. I do not wish to answer this question.
- ○ e. During the sprint retrospective, the DT points out the least effective team member and the PO must accept/reject that team member's work.

A resposta correta é: Both PO and DT, together, define the product features, prioritize the User Stories and elaborate the Product Backlog.

Pergunta 7

Não respondida   Pontuação 1,000

[PROCESS] What is "technical debt?

Selecione uma opção de resposta:

○ a. Tasks left undone.

○ b. I do not wish to answer this question.

○ c. Unrefactored code.

○ d. Code with documentation.

○ e. Technical knowledge the developer lacks acquiring.

A resposta correta é: Unrefactored code.

Pergunta 8

Não respondida   Pontuação 1,000

[PROCESS] Regarding the relationship between UI Mockups (UIM), User Stories (US) and Acceptance Tests (AT), choose which one (of the following) best describes this relationship.

Selecione uma opção de resposta:

○ a. While the ATs define the acceptance criteria of the USs, the UIMs are typically used to validate the user interaction experience.

○ b. Typically, the UIMs describe the necessary steps that allow the final user or Product Owner to validate, using the system, that the US performed accordingly.

○ c. I do not wish to answer this question.

○ d. UIMs are initial drafts of the expected final user interface, that must be, as development progresses, evolved to fully functional system prototypes.

○ e. UIMs must, whenever possible, be built as executable functional prototypes of the system, so that they may run the USs and validate the ATs.

A resposta correta é: While the ATs define the acceptance criteria of the USs, the UIMs are typically used to validate the user interaction experience.

Pergunta 9

Não respondida   Pontuação 1,000

[PROCESS] A unit test is intended to:

Selecione uma opção de resposta:

○ a. Individually test each system unit, with the purpose of isolating each part of the system to guarantee that it functions as expected.

○ b. Individually test each system unit, with the purpose of testing as much methods/classes as possible in a single test.

○ c. Globally test the entire system, with the purpose of isolating each part of the system to guarantee that it functions as expected.

○ d. Globally test the entire system, with the purpose of testing as much functions as possible in a single test.

○ e. I do not wish to answer this question

A resposta correta é: Individually test each system unit, with the purpose of isolating each part of the system to guarantee that it functions as expected.

Pergunta 10

A User Story is considered an "epic" when...

Selecione uma opção de resposta:
- ○ a. ...it fails to clearly define what is to be done.
- ○ b. ...it cannot be currently estimated.
- ○ c. I do not wish to answer this question.
- ○ d. ...it is not humanly possible to complete.
- ○ e. ...the Product Owner puts it as the top priority.

A resposta correta é: ...it cannot be currently estimated.

Pergunta 11

[UML] Consider the UML Component and Deployment diagrams. Select the correct answer.
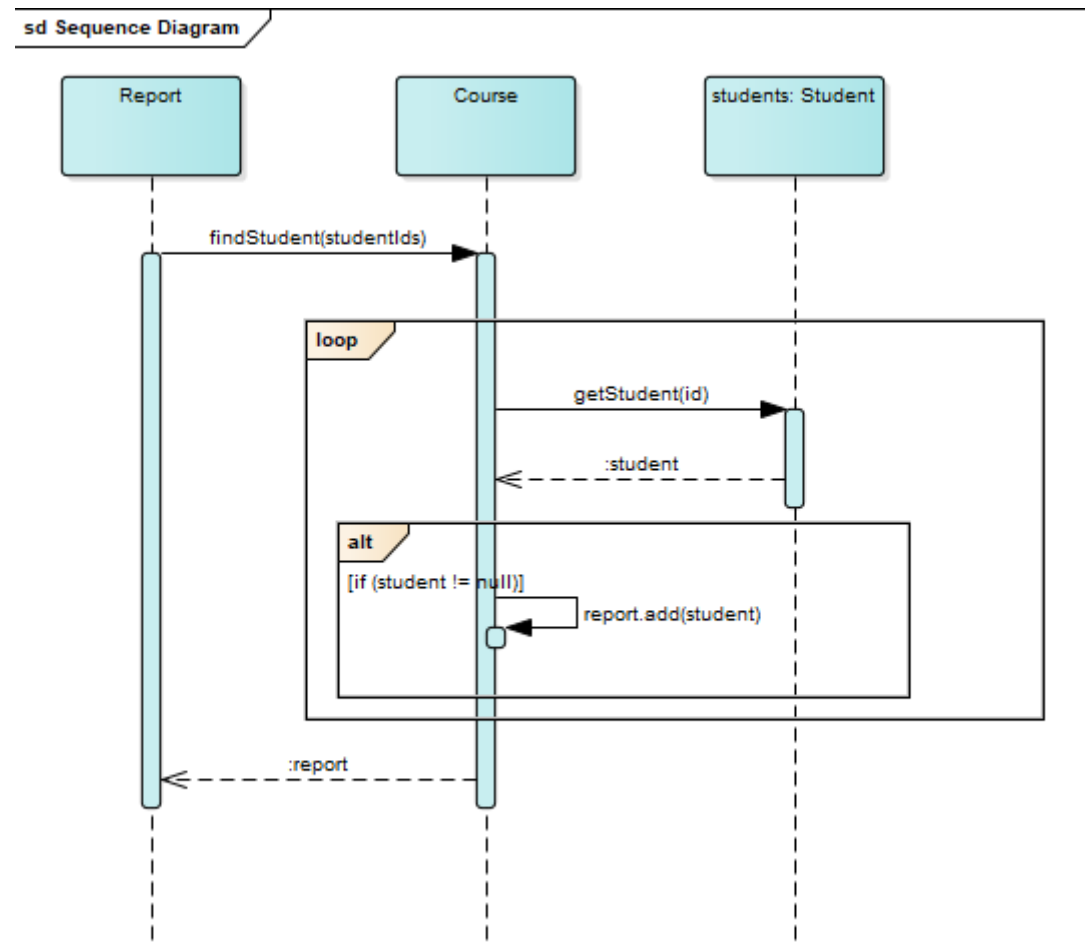
Selecione uma opção de resposta:
- ○ a. Container / Hierarchical nodes represent nodes that contain other nodes, which in turn contain artifacts.
- ○ b. I do not wish to answer this question.
- ○ c. Artifacts are autonomous logical entities, which are encapsulated within a system or subsystem, which manifest themselves through components.
- ○ d. Typical examples of execution environment nodes are application servers, client workstations, mobile devices, embedded devices and database.
- ○ e. In order to represent service dependencies between Device Nodes, interface symbols are used: lollipop for provided interfaces and socket for required interfaces.

A resposta correta é: Container / Hierarchical nodes represent nodes that contain other nodes, which in turn contain artifacts.

Pergunta 12

[UML] The following UML Sequence diagram depicts the general algorithm for a report generation feature, where students are filtered according to their respective course. Select the correct answer.

Selecione uma opção de resposta:

○   a. I do not wish to answer this question.

○   b. While '*findStudent(studentIds)*' is a synchronous message, which requires a reply before continuing with the interaction, '*getStudent(id)*' is an asynchronous message, which do not require such reply, because it is inside a loop Guard.

○   c. The alternative combined fragment could definitely be replaced by the option combined fragment.

○   d. Messages appear along the lifeline without any specific order in which they take place, since activation boxes represent the time they take place and their respective duration.

○   e. Report, Course and Student are actors in the system, interacting with each other within activation boxes.

A resposta correta é: The alternative combined fragment could definitely be replaced by the option combined fragment.

Pergunta 13

[UML] Regarding UML State Diagrams, which information can be represented on a transition between states?

Selecione uma opção de resposta:

○   a. Pre-condition, trigger event, and post-condition.

○   b. Trigger event, guard condition and activity.

○   c. Trigger event, guard condition and effect action.

○   d. Action on entry, trigger event and action on exit.

○   e. I do not wish to answer to this question.

A resposta correta é: Trigger event, guard condition and effect action.

Pergunta 14

[UML] Consider UML class diagrams. Select the correct answer.
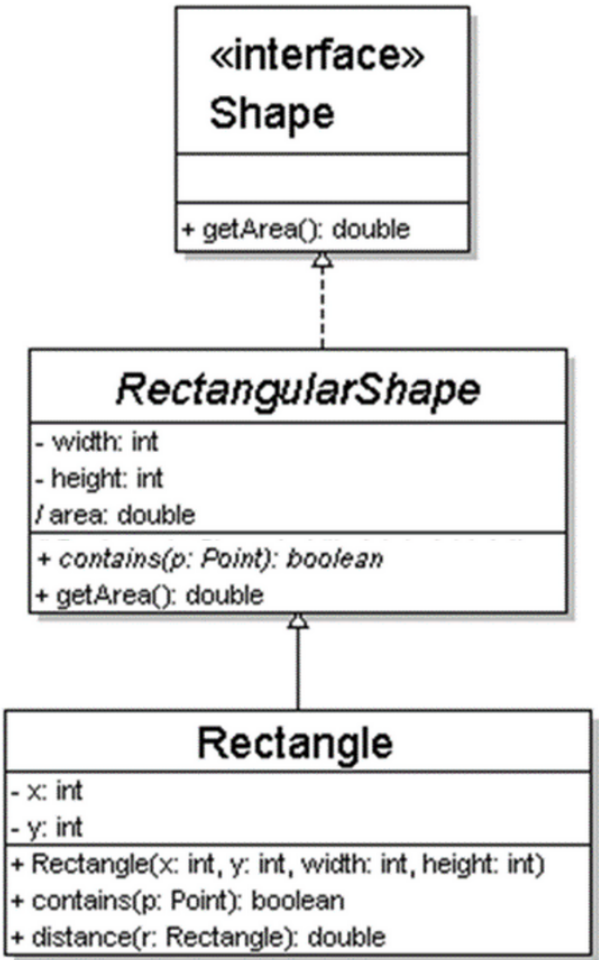
Selecione uma opção de resposta:

○ a. An object is an instance of one or more classes, and there may be multiple instances of the same class, i.e., multiple objects.

○ b. The generalization means a 'is a' or 'is a type of' relationship between two classes, i.e., an object of one class is part of another object of a different class.

○ c. I do not wish to answer to this question.

○ d. The realization is used in relationships between interfaces and concrete classes that implement these interfaces.

○ e. Abstract operations are methods without a body, meaning that each object created by the respective abstract class should define their implementation.

A resposta correta é: The realization is used in relationships between interfaces and concrete classes that implement these interfaces.

Pergunta 15

[UML] Consider the following UML Class Diagram. Select the correct answer.

Selecione uma opção de resposta:

○ a. I do not wish to answer to this question.

○ b. The operation *contains (p: Point)* is defined in the *RectangularShape* class and implemented in the *Rectangle* class.

○ c. There is inheritance of interface and implementation between the *RectangularShape* class and the *Shape* interface.

○ d. Attributes *x* and *y* also belong to the *RectangularShape* class.

○ e. The *RectangularShape* class is a realization of the *Rectangle* class.

A resposta correta é: The operation *contains (p: Point)* is defined in the *RectangularShape* class and implemented in the *Rectangle* class.

Pergunta 16

[UML] In an UML Use Case Diagram, what is the most correct definition of actor?
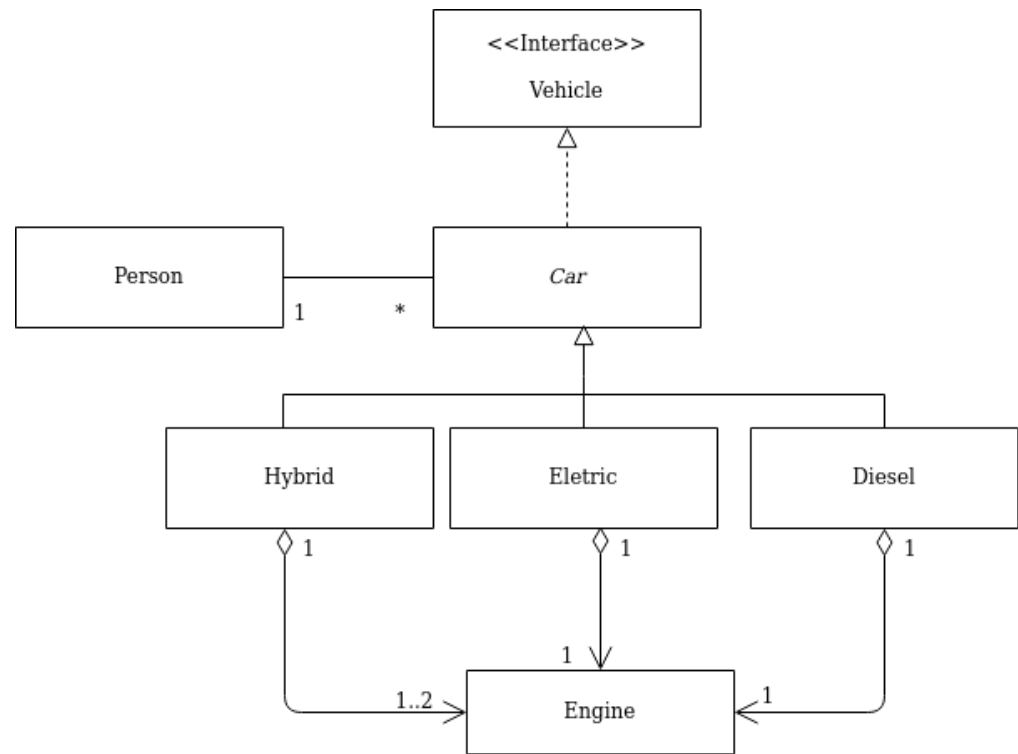
Selecione uma opção de resposta:

○ a. I do not wish to answer to this question.

○ b. An actor represents specific users who interact with the system.

○ c. An actor represents any external element that interacts with the system.

○ d. An actor represents the role played by users when interacting with the system.

○ e. An actor represents equipment and other systems when interacting with the system.

A resposta correta é: An actor represents any external element that interacts with the system.

Pergunta 17

[UML] What is the most correct Java translation of class 'Engine' from the following UML class diagram?

Selecione uma opção de resposta:

○ a. **class Engine { Engine(); Set<Hybrid> h; Eletric e; Diesel d;}**

○ b. I do not wish to answer to this question.

○ c. **class Engine implements Hybrid, Eletric, Diesel { Engine(); }**

○ d. **class Engine extends Hybrid, Eletric, Diesel { Engine(); }**

○ e. **class Engine { Engine(); }**

A resposta correta é: **class Engine { Engine(); }**

Pergunta 18

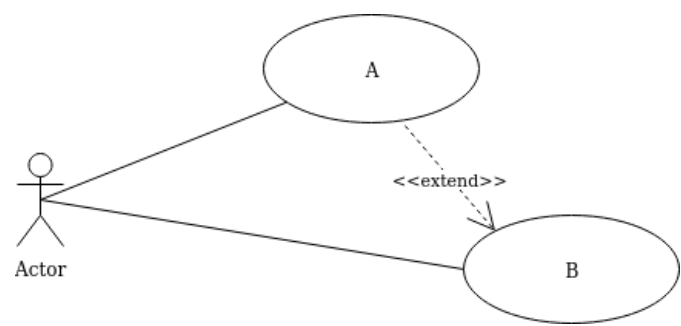[UML] Regarding UML, select the correct answer.

Selecione uma opção de resposta:

○ a. In UML, structure diagrams, such as the sequence diagrams, activity diagrams and state machine diagrams, emphasize the things that must be present in the system being modeled.

○ b. UML was intended and is used specifically for object-oriented design documentation.

○ c. In UML, one of the key tools for dynamic behavior modelling is the class diagram.

○ d. I do not wish to answer to this question.

○ e. UML, short for Unified Modeling Language, is a standardized modeling language enabling developers to specify, visualize, construct and document artifacts of a software system.

A resposta correta é: UML, short for Unified Modeling Language, is a standardized modeling language enabling developers to specify, visualize, construct and document artifacts of a software system.

Pergunta 19

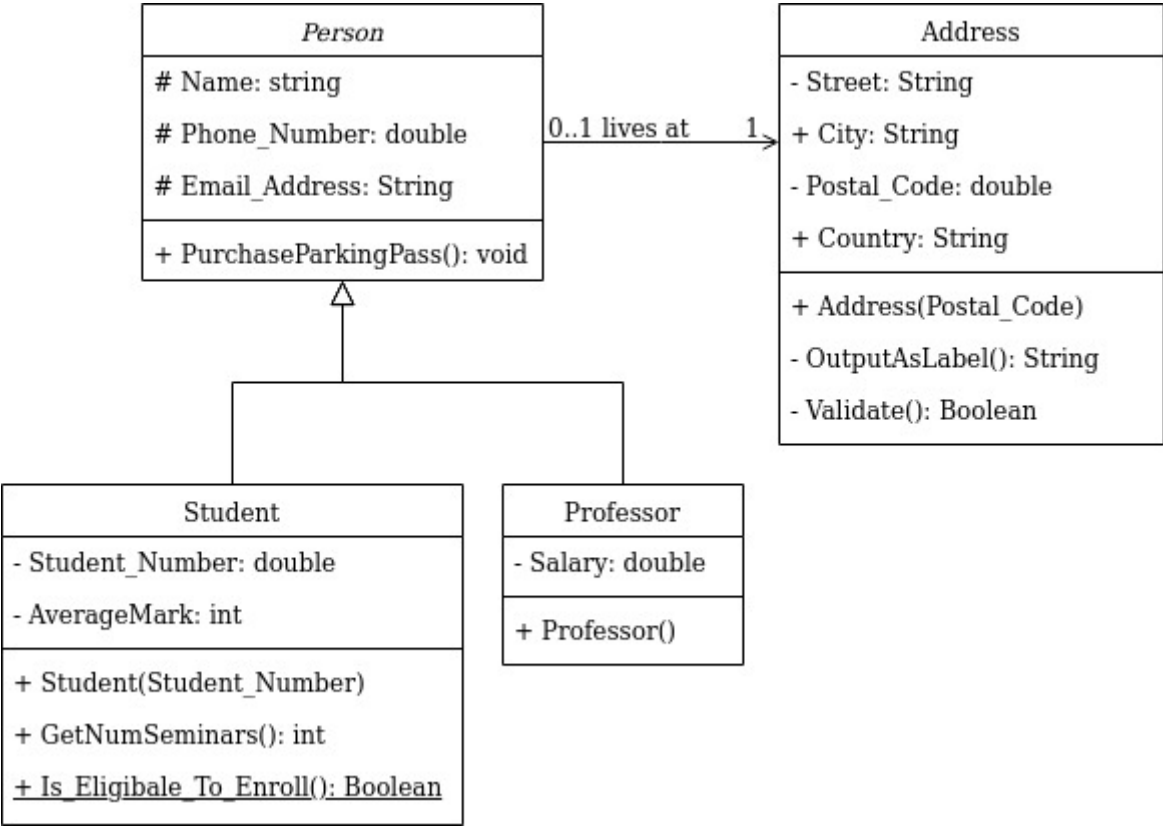[UML] Regarding the next UML Use Case Diagrams, the *<<extend>>* relationship means:

Selecione uma opção de resposta:

○ a. B may or may not execute A.

○ b. I do not wish to answer to this question.

○ c. B must execute A.

○ d. A may or may not execute B.

○ e. B may be executed instead of A.

A resposta correta é: B may or may not execute A.

[UML] Consider the next UML Class Diagram. Select the correct answer.

Person
Name: string
Phone_Number: double
Email_Address: String
+ PurchaseParkingPass(): void

0..1 lives at   1

Address
- Street: String
+ City: String
- Postal_Code: double
+ Country: String
+ Address(Postal_Code)
- OutputAsLabel(): String
- Validate(): Boolean

Student
- Student_Number: double
- AverageMark: int
+ Student(Student_Number)
+ GetNumSeminars(): int
+ Is_Eligibale_To_Enroll(): Boolean

Professor
- Salary: double
+ Professor()

Selecione uma opção de resposta:

○ a. Direct instantiation of the class *Person* is not possible.

○ b. I do not wish to answer to this question.

○ c. The attributes of the *Person* class are protected, which means that are not visible outside the class.

○ d. The operation *Is_Eligibale_To_Enroll()* is static, which means the class *Student* is abstract by nature.

○ e. According to the diagram, it can be students or professors homeless.

A resposta correta é: Direct instantiation of the class *Person* is not possible.