

Quiz 8 - UML in Practice - Results



Attempt 1 of 2

Written Mar 8, 2024 4:50 AM - Mar 8, 2024 5:07 AM

Attempt Score 5 / 5 - 100 %

Overall Grade (Highest Attempt) 5 / 5 - 100 %

Question 1

1 / 1 point

According to the author (Marian Petre), participants were interviewed on their uses of UML. Order the respondent uses from the most popular response (1) to the least popular one (5).

- __1__ No use of UML.
- __5__ Wholehearted use of UML.
- __4__ Retrofit use, i.e., documenting things after-the-fact.
- __2__ Selective uses of UML.
- __3__ Use for automated code generation.

Question 2

1 / 1 point

According to the author (Marian Petre), the research participants who do not use UML have identified some problems with this language that leads to their non-adoption. Mark all the options that contain sentences related to those problems.

Select 3 correct answer(s)

- ☒ The complexities of the UML notation limited its utility in discussions with stakeholders.
- ☐ UML is adapted to the tasks, which lead to changing the diagrams in unconventional ways.
- ☒ The issue of synchronization between UML models and code is a barrier for UML adoption.
- ☒ UML deals primarily with software architecture rather than the "whole" system, and hence it lacks context.
- ☐ UML is more used to help developers think about code.
- ☐ Communication between stakeholders requires that UML diagrams be kept simple.
- ☐ UML is used to provide a common representation from which to drive discussion and build a shared model of the problem context.

Question 3

1 / 1 point

According to the author (Marian Petre), the research participants who use UML in a selective way have different uses for the language. Mark all the options that contain sentences related to those different uses of UML.

Select 3 correct answer(s)

- ☒ Some users adapted UML to their tasks, which led them to take license with the notation and change the diagrams in unconventional ways.
- ☐ Some participants used UML as their main expression during the initial phases of the Rational Unified Process (RUP).
- ☒ Some participants used UML to help them think about the code, like using a scratch pad.
- ☐ Some users used UML to split the roles in the project: software designers would write UML diagrams, and software developers would write the code that abides by the rules in those diagrams.
- ☒ Some participants used UML to provide a common representation from which to drive discussion and build a shared model of the problem context and design proposals.
- ☐ Some participants used UML to keep software artifacts synchronized, such as keeping class and sequence diagrams up-to-date with the source code.

Question 4**1 / 1 point**

According to the author (Marian Petre), the research participants who use UML in a selective way prefer some particular diagrams from this language. Mark all the options that contain diagrams that participants explicitly declared they used themselves.

Select 5 correct answer(s)

- ☐ Profile diagram
- ☐ Interaction overview diagram
- ☐ Composite structure diagram
- ☒ Class diagram
- ☐ Component diagram
- ☒ Activity diagram
- ☒ Sequence diagram
- ☐ Object diagram
- ☐ Deployment diagram
- ☐ Package diagram
- ☐ Timing diagram
- ☒ State machine diagram
- ☒ Use case diagram
- ☐ Communication diagram

Question 5**1 / 1 point**

According to the author (Marian Petre), the research revealed that UML is useful sometimes. Mark all the options that contain scenarios when UML representations are useful.

Select 3 correct answer(s)

- ☒ When they are understandable and fit for the practitioner's purpose.
- ☒ When they capture structure the correct level of abstraction.
- ☒ When they make behavior explicit, for instance, by showing a sequence of actions.
- ☐ When they are used for upfront design, i.e., for designing the whole software structure before coding.
- ☐ When they restrict the code to design decisions expressed in the diagrams.
- ☐ When they are used for providing precise semantics of particular scenarios of actor-system interaction.
- ☐ When they are enforced by the organization for providing a "lingua franca" for software developers that work with different programming languages.

Done