SOEN 6011:

Quiz 1 Review

1. Why is software engineering important?

a. To reduce software development time

b. To reduce software development cost

c. To improve software quality and reliability

Ans: c. To improve software quality and reliability Explanation: Software engineering is important because it provides a systematic and disciplined approach to software development that leads to improved software quality and reliability. This, in turn, helps to reduce software development time and cost by reducing the number of bugs and making it easier to maintain and update the software.

1. What is the goal of identifying common facilities in an incremental delivery process?

a. To optimize the use of facilities in each project phase

b. To reduce the failure risk

c. To increase product performance

d. To prioritize the requirements

Answer a: To optimize the use of facilities in each project phase

1. Which of the following is a difference between an engineered product and a software product?

a. An engineered product is tangible while a software product is intangible

b. An engineered product is developed using a different set of processes and methodologies than a software product.

c. An engineered product is developed for a different set of purposes than a software product.

d. None of the above

Ans: A. An engineered product is tangible while a software product is intangible is the correct answer. An engineered product is tangible, it can be touched and used, while a software product is intangible, it exists in the form of code and can be executed on a computer

1. Engineered development is a systematic and controlled process for designing, developing, and delivering software products and systems. Which of the following best describes the characteristics of engineered development?

a. Ad-hoc and unplanned

b. Iterative and incremental

c. Rigid and inflexible

d. Reactive and responsive

Ans: b: Iterative and incremental

Engineered development is an iterative and incremental process, meaning that it is divided into small, manageable chunks called iterations, and the work progresses through these iterations in a controlled and incremental manner. This approach allows for flexibility and adaptability, where changes and improvements can be made as the project progresses. It also allows for testing and validation at various stages of the development process, which helps identify and resolve issues early on.

1. Which of the following best describes the acceptability of a software?

a. The ability of the software to be easily understood and used by the intended user or customer

b. The ability of the software to function correctly under normal and abnormal conditions, including aspects such as reliability, availability, safety, and maintainability

c. The ability of the software to protect against unauthorized access or attacks

Ans: a. The ability of the software to be easily understood and used by the intended user or customer

Acceptability is an attribute of good software that refers to the ability of the software to meet the needs and expectations of its intended users or customers. This includes aspects such as usability, learnability, and user satisfaction. Usability refers to the ease of use and the ability of the software to perform its intended functions without errors. Learnability refers to the ease of learning how to use the software. User satisfaction refers to the degree to which the user is satisfied with the software. Acceptability is an important aspect of software engineering as it ensures the software meets the needs and expectations of its intended users or customers and it can be used easily and efficiently.

1. Which one of the following is not a product of the design phase?

a. System structure

b. Data model

c. Source Code

d. System interfaces

Ans: c: (Source Code) is not a product of the design phase. The design phase is focused on creating detailed plans and spe\cifications for the software system, while the implementation phase is focused on writing and testing the source code. The other options A, B, C, D are products of the design phase which are Software architecture, Detailed design, Test plan, Implementation plan.

1. Which process model is typically better suited for building new software, as opposed to growing and maintaining software?
2. Waterfall
3. Agile
4. V-Model
5. Spiral
6. a, c, d

Ans: a: Waterfall

1. What is the main goal of a spiral model development process.
2. To produce high-quality software as quickly as possible.
3. To produce software that meets the customer's requirements.
4. To produce software that can be easily maintained and evolved.
5. To balance the risks and benefits of a software project

Ans: D) To balance the risks and benefits of a software project.

1. What is the purpose of a Sprint in Scrum?
2. To provide a deadline for the completion of a set of features
3. To allow the development team to prioritize the features they want to implement.
4. To provide a fixed length iteration for the development team to complete a set of features.

Answer: c. To provide a fixed length iteration for the development team to complete a set of features.