Question 1

Complete

Mark 1 out of 1

2. What activities are software engineers involved in?

○ a. Developing marketing strategies

○ b. Building hardware components

○ c. Conducting medical research

◉ d. Designing and testing software systems

The correct answer is: Designing and testing software systems

Question 5

Incorrect

Mark 0 out of 1

8. What percentage of software costs are development costs?

- a. Roughly 20%
- b. Roughly 40%
- c. Roughly 80% ✗
- d. Roughly 60%

Question 2

Correct

Mark 1 out of 1

2. What does the term "professional software development" include?

- a. Hardware architecture design
- b. Computer programs only
- c. Computer programs and associated documentation ✔
- d. None of the above

Question 3

Correct

Mark 1 out of 1

4. What are the two kinds of software products?

- a. Customized products and embedded systems
- b. Open-source software and proprietary software
- c. Generic products and customized products ✔
- d. Stand-alone systems and distributed systems

Question 4

Incorrect

Mark 0 out of 1

6. What are the essential attributes of good software?

- a. Maintainability, dependability, and efficiency
- b. Efficiency, security, and compatibility
- c. Maintainability, security, and usability ✘
- d. Reliability, usability, and compatibility

QUIZ

اساسيات هندسة برمجيات < quiz1

Started on	Wednesday, 2 August 2023, 2:04 PM
State	Finished
Completed on	Wednesday, 2 August 2023, 2:12 PM
Time taken	8 mins 22 secs
Grade	**3** out of 5 (**60%**)

Question 1

Correct

Mark 1 out of 1

1. Is software engineering considered a branch of engineering?

- a. Sometimes
- b. Not sure
- c. Yes ✔
- d. No

82. Why is software evolution necessary?

- a. To reduce system complexity
- b. To adapt to changing business circumstances
- c. To remain static and unchangeable
- d. To meet initial requirements

Question 19

Complete

Mark 1 out of 1

1. Is software engineering considered a branch of engineering?

- 🔴 a. Yes
- ○ b. Not sure
- ○ c. No
- ○ d. Sometimes

Question 20

Complete

Mark 0 out of 1

36. How does incremental development differ from the waterfall model?

- 🔴 a. It exposes initial implementation to user comments
- ○ b. It requires a detailed system specification upfront
- ◉ c. It involves only a single iteration of development
- ○ d. It focuses on a fixed and unchanging set of requirements

Question 21

Complete

Mark 0 out of 1

84. How does software evolution relate to changing requirements?

- ◉ a. Software evolution is independent of changing requirements
- 🔴 b. Software must evolve to accommodate changing requirements
- ○ c. Software evolution hampers changing requirements
- ○ d. Changing requirements have no impact on software

Question 17

Complete

Mark 0 out of 1

59. What is the purpose of software specification or requirements engineering?

🔴 a.   All of the above
  ◯ b.   To establish what services are provided by the system
  ◉ c.   To establish stakeholder requirements for the system
  ◯ d.   To define the constraints on the system's operation

Question 18

Complete

Mark 0 out of 1

50. What are web services in the context of software components?

🔴 a.   Remote-invocable services developed according to standards.
  ◉ b.   Collections of objects integrated with a component framework.
  ◯ c.   Software systems developed for stand-alone use.
  ◯ d.   Pre-configured software systems for specific environments.

12. Which of the following is an example of a role in software engineering processes?

- a. Software module
- b. Documentation template
- c. Code snippet
- 🔴 d. Project manager

105. What is a key advantage of using incremental delivery in software development?

- a. Reduced development effort.
- 🔴 b. Lower risk of system failures.
- c. Simplified requirements analysis.
- d. Faster completion of the entire system.

2. What does the term "professional software development" include?

- ○ a. Computer programs only
- ○ b. Hardware architecture design
- ○ c. None of the above
- 🔴 d. Computer programs and associated documentation

4. What are the two kinds of software products?

- ○ a. Open-source software and proprietary software
- ○ b. Stand-alone systems and distributed systems
- 🔴 c. Generic products and customized products
- ○ d. Customized products and embedded systems

89. How does change tolerance in the software process work?

- ○ a. By implementing all changes immediately
- ○ b. By eliminating the possibility of any changes
- 🔴 c. By accommodating changes at relatively low cost
- ○ d. By rejecting any change requests

Question 8

Complete

Mark 1 out of 1

5. Who owns the specification of what the software should do in the case of generic products?

- a. The government
- b. The customer
- c. Both A and B
- 🔴 d. The software developer

Question 9

Complete

Mark 0 out of 1

98. When developing a system prototype, what area of the software should be the primary focus?

- a. Implementing all available functionality for testing purposes.
- b. Non-functional requirements such as security and reliability.
- 🔴 c. Areas of the product that are already well-understood.
- d. Functional requirements that are complex and challenging.

Question 10

Complete

Mark 0 out of 1

95. What is the purpose of using a system prototype during the design phase?

- a. To perform thorough error checking and recovery testing.
- 🔴 b. To conduct design experiments and assess design feasibility.
- c. To demonstrate the final implementation of the software.
- d. To test the prototype with typical system users.

Question 6
Complete
Mark 1 out of 1

119. How does the RUP handle cross-phase iteration?

- a. It emphasizes linear progression through phases.
- b. It allows iterations across multiple phases.
- c. It allows iterations within a single phase.
- d. It does not support iteration in any form.

Question 7
Complete
Mark 5 out of 5

There are separate identified phases in the waterfall model, match the phase with its correction definition.

The individual program units or programs are integrated and tested as a complete system to ensure that the software requirements have been met. After testing, the software system is delivered to the customer

Integration and system testing ●

The system's services, constraints, and goals are established by consultation with system users. They are then defined in detail and serve as a system specification.

Requirements analysis and definition ●

Software design involves identifying and describing the fundamental software system abstractions and their relationships.

System and software design ●

This is the longest life cycle phase. The system is installed and put into practical use. Maintenance involves correcting errors which were not discovered in earlier stages of the life cycle, improving the implementation of system units and enhancing the system's services as new requirements are discovered.

Operation and maintenance ●

the software design is realized as a set of programs or program units. Unit testing involves verifying that each unit meets its specification.

Implementation and unit testing ●

Question 3

Complete

Mark 0 out of 1

51. How are collections of objects typically developed and integrated with component frameworks like .NET or J2EE?

- ○ a.   As packages for integration with the framework.
- ◉ b.   As web services using service standards.
- 🔴 c.   As remote-invocable services.
- ○ d.   As stand-alone software systems.

Question 4

Complete

Mark 1 out of 1

35. What is the fundamental idea behind incremental development?

- ○ a.   Planning all process activities in advance
- ○ b.   Implementing software without user involvement
- ○ c.   Developing a complete system in a single phase
- 🔴 d.   Evolving an initial implementation through versions

Question 5

Complete

Mark 0 out of 1

6. In which scenario would a software process be most applicable?

- 🔴 a.   Developing a complex software system with changing requirements
- ○ b.   Writing a short code snippet for personal use
- ◉ c.   Developing a simple standalone application
- ○ d.   Creating a random set of software activities

Question 1

Complete

Mark 0 out of 1

117. Which phase of RUP involves deploying the system in its operating environment?

- ● a. Transition
- ◉ b. Elaboration
- ○ c. Inception
- ○ d. Construction

Question 2

Complete

Mark 1 out of 1

6. What are the essential attributes of good software?

- ○ a. Efficiency, security, and compatibility
- ○ b. Maintainability, security, and usability
- ○ c. Reliability, usability, and compatibility
- ● d. Maintainability, dependability, and efficiency

Question 4

Complete

Mark 1 out of 1

4. How many Principles are included in the Code of Ethical Practice for professional software engineers?

○ a.   Five Principles

◉ b.   Eight Principles

○ c.   Nine Principles

○ d.   Six Principles

The correct answer is: Eight Principles

Question 5

Complete

Mark 1 out of 1

9. Which of the following activities are covered by the Eight Principles in the software engineering code of ethics?

○ a.   Architecture and interior design

○ b.   Sculpting and painting

◉ c.   Analysis, specification, design, development, testing, and maintenance of software

○ d.   Writing and publishing novels

The correct answer is: Analysis, specification, design, development, testing, and maintenance of software

Question 2

Complete

Mark 1 out of 1

12. What is the focus of the third ethical principle of the code?

- a. Maximizing personal profits
- b. Ensuring that products meet the highest professional standards
- c. Meeting minimal professional standards
- d. Exceeding the public interest

The correct answer is: Ensuring that products meet the highest professional standards

Question 3

Complete

Mark 1 out of 1

1. Who are software engineers?

- a. Individuals who contribute to the development of software systems
- b. Individuals who teach computer programming
- c. Individuals who use computers for personal tasks
- d. Individuals who repair computer hardware

The correct answer is: Individuals who contribute to the development of software systems