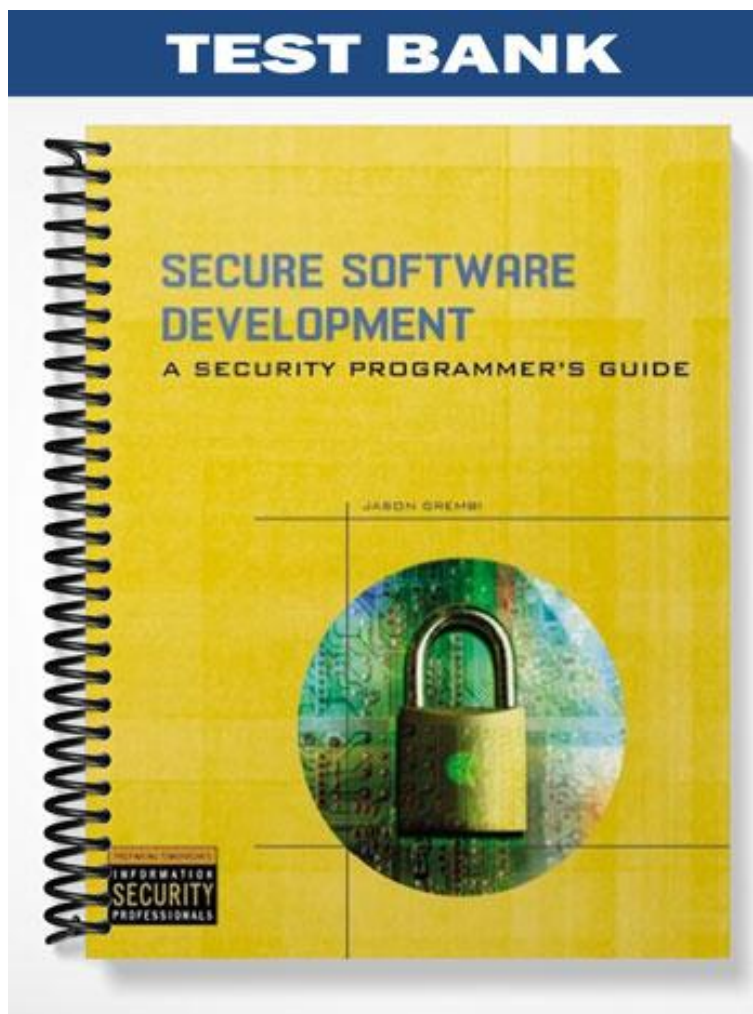


TEST BANK



SECURE SOFTWARE DEVELOPMENT

A SECURITY PROGRAMMER'S GUIDE

JASON CREMIE



SPECIAL EDITION
INFORMATOR
SECURITY
PROFESSIONALS

Chapter 2: Coding in the SDLC: Not a Solitary Practice

TRUE/FALSE

1. A secure software development process includes 3 main ingredients. They are:
SDLC in the industry
SDLC in the organization
SDLC in the cube

ANS: T PTS: 1 REF: 32

2. The software life cycles are the various activities, or phases, that software goes through from concept to implementation.

ANS: F PTS: 1 REF: 33

3. CMMI defines how effective organizations are at following a formal development process by classifying the organization into maturity levels.

ANS: T PTS: 1 REF: 35

4. Software methodology is a set of methods, procedures and rules that can be performed only once during the production of software.

ANS: F PTS: 1 REF: 35

5. Traditional methodologies include the following:
Waterfall
Iterative
Spiral

ANS: T PTS: 1 REF: 36

6. The waterfall methodology is a way to develop software following through each phase of the life cycle from one to the next in a random manner.

ANS: F PTS: 1 REF: 37

7. The iterative methodology is great for moderate to large applications with varying degrees of complexity.

ANS: T PTS: 1 REF: 38

8. Created by Barry Boehm, the Spiral Methodology was created for projects considered to be of low to moderate risk.

ANS: F PTS: 1 REF: 40

9. Team Software Process (TSP) is an example of an advanced methodology.

ANS: T PTS: 1 REF: 41

10. TSP and PSP are methodologies that do not work well with CMMI.
ANS: F PTS: 1 REF: 42
11. Agile software development is a conceptual framework for undertaking software engineering projects.
ANS: T PTS: 1 REF: 43
12. Extreme Programming (XP) is an example of an agile development process.
ANS: T PTS: 1 REF: 43
13. XP produces a lot of documentation.
ANS: F PTS: 1 REF: 43
14. Touchpoints are activities that the development team needs to do during a particular phase of the SDLC.
ANS: T PTS: 1 REF: 44
15. A Hybrid Methodology requires a development team to stick to only one process or standard.
ANS: F PTS: 1 REF: 45
16. All development methodologies share one common element: people.
ANS: T PTS: 1 REF: 46
17. If you want to improve the SDLC on your team, learn how to work independently.
ANS: F PTS: 1 REF: 46
18. An effective Project Manager has good people skills, communication skills, and interpersonal skills.
ANS: T PTS: 1 REF: 48
19. It is not the job of the PM to define roles and responsibilities.
ANS: F PTS: 1 REF: 49
20. Anyone on the team can assign duties.
ANS: F PTS: 1 REF: 50
21. Cliques and office politics should be avoided when on a team.
ANS: T PTS: 1 REF: 50
22. C.I.A. stands for the 3 main principles in secure code: Confidentiality, integrity, and availability.
ANS: T PTS: 1 REF: 51
23. A Framework is a process or structure with no set definition.

ANS: F PTS: 1 REF: 51

24. PMP is a type of methodology.

ANS: F PTS: 1 REF: 52

25. Coding and testing are 2 phases of the software life cycle.

ANS: T PTS: 1 REF: 52

MULTIPLE CHOICE

1. Sharing sensitive information between applications has made writing code more of an orchestrated event than a ____ practice.
- a. Group
 - b. Solitary
 - c. Team
 - d. Lonely

ANS: B PTS: 1 REF: 32

2. What are various activities, or phases, that software goes through from concept to retirement?
- a. Software development
 - b. Software construction
 - c. Methodologies
 - d. Software life cycles

ANS: D PTS: 1 REF: 33

3. Which standard is the standard of all standards regarding software development?
- a. CMMI
 - b. ISO 12207
 - c. IEEE 1506
 - d. SEI

ANS: B PTS: 1 REF: 33

4. This standard is part of Carnegie Mellon University, defines standards with government organizations, businesses, and academia to improve the software development process.
- a. CMMI
 - b. IEEE 12207
 - c. NIST
 - d. ISO

ANS: A PTS: 1 REF: 33

5. What is a set of methods, procedures, and rules that can be repeatedly carried out to produce software?
- a. Standards
 - b. Software testing
 - c. Software methodology
 - d. Software development

ANS: C PTS: 1 REF: 35

6. Which process is not part of the IEEE 12207?
- a. Primary
 - b. Organizational
 - c. Development
 - d. Supportive

ANS: C PTS: 1 REF: 34

7. Why is following a methodology important?
- a. Produces consistency
 - b. Produces reliability
 - c. Produces security
 - d. Produces quality

ANS: A PTS: 1 REF: 36

8. Which of the following is not considered to be a Traditional methodology?
- a. Waterfall
 - b. Iterative
 - c. Spiral
 - d. Agile

ANS: D PTS: 1 REF: 36

9. This methodology is a way to develop software following through each phase of the life cycle from one to the next in a very sequential manner.
- a. Spiral
 - b. Waterfall
 - c. Agile
 - d. TSP

ANS: B PTS: 1 REF: 37

10. This methodology allows the users and developers more time to focus on building one requirement at a time.
- a. TSP
 - b. Agile
 - c. Spiral
 - d. Iterative

ANS: D PTS: 1 REF: 38

11. This methodology allows the users and developers to proceed to build the requirement only if the level of risk is acceptable.
- a. Spiral
 - b. Iterative
 - c. Agile
 - d. TSP

ANS: A PTS: 1 REF: 40

12. This methodology is based on 13 stages of activities that are primarily focused on building security in the development process.
- a. Agile
 - b. Spiral
 - c. Security Development Lifecycle
 - d. TSP

ANS: C PTS: 1 REF: 41

13. This methodology provides frameworks, a set of processes, and methods for producing quality and security principles in software.
- a. Security Development Lifecycle
 - b. TSP
 - c. Agile
 - d. Touchpoints

ANS: B PTS: 1 REF: 42

14. This methodology allows a very fluid communication stream with end users and uses the produced software as a measure of progress.
- a. Security Development Lifecycle
 - b. TSP
 - c. Agile
 - d. Touchpoints

ANS: C PTS: 1 REF: 43

15. This methodology strictly works in security design, principles, and features in each phase of the software life cycle.
- a. Touchpoints
 - b. Agile
 - c. TSP
 - d. Iterative

ANS: A PTS: 1 REF: 44

16. This methodology allows the development team to start off very formal but lessens as the development team produces synergy, and system knowledge and experience.
- a. Agile
 - b. Hybrid
 - c. TSP
 - d. Touchpoints

ANS: B PTS: 1 REF: 45

17. What one thing does all software methodologies share in common?
- a. Detailed requirements
 - b. People
 - c. Sound design
 - d. Quality code

ANS: B PTS: 1 REF: 46

18. Why is active listening *such* an important part in the job of software development?
- a. One must be able to convey meaning
 - b. One must be able to write emails and requirements
 - c. One must be able to draw
 - d. One must be able to paraphrase and summarize someone else's thoughts and ideas

ANS: D PTS: 1 REF: 46

19. This person is responsible for understanding the system's requirements and how the system was designed and developed, and knows how to break the software.
- a. Tester
 - b. Developer
 - c. Business Analyst
 - d. Project Manager

ANS: A PTS: 1 REF: 48

20. This person is responsible for knowing the business rules and customer requirements.
- a. Project Manager
 - b. Tester
 - c. Business Analyst
 - d. Developer

ANS: C PTS: 1 REF: 48

21. This person is responsible for knowing the technology, requirements, and application design.
- a. Developer
 - b. Tester
 - c. Project Manager
 - d. Business Analyst

ANS: A PTS: 1 REF: 48

22. This person is responsible for knowing the security needs of the application, types of software attacks, and how to break the software.
- a. Developer
 - b. Tester
 - c. Business Analyst
 - d. All of the above

ANS: B PTS: 1 REF: 48

23. What is the key ingredient of teamwork in software development?
- a. Know the programming language
 - b. Know who your colleagues are
 - c. Know who the boss is
 - d. Know your role and responsibility

ANS: D PTS: 1 REF: 49

24. What is the most common mistake project managers make with roles and responsibilities?
- a. They are assumed and not defined

- b. Hand them out too early
- c. Define them too well
- d. Make sure no one does more than they are supposed to.

ANS: A

PTS: 1

REF: 49

MULTIPLE RESPONSE

- 1. What are some pitfalls to avoid while working as a team?
 - a. Cliques
 - b. Hobbies
 - c. Politics
 - d. Lunches

ANS: A, C

PTS: 1

REF: 50