

## 第 1 章

1. Which question no longer concerns the modern software engineer?

A. Why does computer hardware cost so much?

B. Why does software take a long time to finish?

C. Why does it cost so much to develop a piece of software?

D. Why can't software errors be removed from products prior to delivery?

1. 哪个问题不再涉及现代软件工程师？

A. 为什么计算机硬件成本太高？

B. 为什么软件需要很长时间才能完成？

C. 为什么开发一个软件需要花费这么多钱？

D. 为什么在交付之前不能从产品中删除软件错误？

2. Software is a product and can be manufactured using the same technologies used for other engineering artifacts

A. True

B. False

2. 软件是一种产品，可以使用与其他工程工件相同的技术制造

3. Software deteriorates rather than wears out because

A. Software suffers from exposure to hostile environments

B. Defects are more likely to arise after software has been used often

C. Multiple change requests introduce errors in component interactions

D. Software spare parts become harder to order

3. 软件恶化而不是磨损，因为

A. 软件遭受恶劣环境的影响

B. 软件经常使用后更容易出现缺陷

C. 多个变更请求会在组件交互中引入错误

D. 软件备件变得更难订购

4. WebApps are a mixture of print publishing and software development, making their development outside the realm of software engineering practice.

A. True

B. False

4. WebApps 是印刷出版和软件开发的混合体，使得它们的开发超出了软件工程实践的范畴。

5. There are no real differences between creating WebApps and MobileApps.

A. True

B. False

5. 创建 WebApp 和 MobileApps 之间没有真正的区别。

6. In its simplest form an external computing device may access cloud data services using a web browser.

A. True

B. False

6. 在其最简单的形式中，外部计算设备可以使用 web 浏览器访问云数据服务。

7. Product line software development depends the reuse of existing software components to provide software engineering leverage.

A. True

B. False

7. 产品线软件开发依赖于现有软件组件的重用，以提供软件工程的杠杆作用。

## 第 2 章

1. Which of the items listed below is not one of the software engineering layers?

A. Process

B. Manufacturing

C. Methods

D. Tools

1. 下面列出的哪些项目不是软件工程层之一？

A. 一个过程

B. 制造业

C. 方法

D. 工具

2. Software engineering umbrella activities are only applied during the initial phases of software development projects.

A. True

B. False

2. 软件工程伞活动仅适用于软件开发项目的初始阶段。

3. Which of these are the 5 generic software engineering framework activities?

A. communication, planning, modeling, construction, deployment

B. communication, risk management, measurement, production, reviewing

C. analysis, designing, programming, debugging, maintenance

D. analysis, planning, designing, programming, testing

3. 以下哪些是通用软件工程框架活动？

A. 沟通，规划，建模，施工，部署

B. 沟通，风险管理，测量，生产，审查

C. 分析，设计，编程，调试，维护

D. 分析，规划，设计，编程，测试

4. Planning ahead for software reuse reduces the cost and increases the value of the systems into which they are incorporated.

A. True

B. False

4. 提前规划软件重用可以降低成本并提高它们所包含的系统的价值。

5. The essence of software engineering practice might be described as understand the problem, plan a solution, carry out the plan, and examine the result for accuracy.

A. True

B. False

5. 软件工程实践的本质可以描述为理解问题，计划解决方案，执行计划，并检查结果的准确性。

6. In agile process models the only deliverable work product is the working program.

A. True

B. False

6. 在敏捷流程模型中，唯一可交付的工作产品是工作程序。

7. A most software development projects are initiated to try to meet some business need.

A. True

B. False

7. 大多数软件开发项目都是为了满足某些业务需求而启动的。

8. In general software only succeeds if its behavior is consistent with the objectives of its designers.

A. True

B. False

8. 一般而言，只有软件的行为与其设计者的目标一致，才能成功。

### 第 3 章

1. Which of the following are recognized process flow types?

- A. Concurrent process flow
- B. Iterative process flow
- C. Linear process flow
- D. Spiral process flow

E. both a and c

1. 以下哪些是公认的工艺流程类型？

- A. 并发流程
- B. 迭代过程流程
- C. 线性工艺流程
- D. 螺旋工艺流程
- E. a 和 c

2. The communication activity is best handled for small projects using six distinct actions (inception, elicitation, elaboration, negotiation, specification, validation).

A. True

B. False

2. 使用六种不同的行动（初始，启发，详细，协商，规范，验证），最好为小型项目处理通信活动。

3. A good software development team always uses the same task set for every project to insure high quality work products

A. True

B. False

3. 优秀的软件开发团队总是为每个项目使用相同的任务集来确保高质量的工作产品

4. Software processes can be constructed out of pre-existing software patterns to best meet the needs of a software project.

A. True

B. False

4. 可以使用预先存在的软件模式构建软件过程，以最好地满足软件项目的需要。

5. Which of these are standards for assessing software processes?

- A. SEI
- B. SPICE
- C. ISO 9000
- D. ISO 9001

E. both b and d

5. 以下哪些是评估软件过程的标准？

- A. SEI
- B. SPICE
- C. ISO 9000
- D. ISO 9001
- E. b 和 d

## 第 4 章

1. The waterfall model of software development is

- A. A reasonable approach when requirements are well defined.
- B. A good approach when a working program is required quickly.
- C. The best approach to use for projects with large development teams.
- D. An old fashioned model that is rarely used any more.

1. 软件开发的瀑布模型是

- A. 当需求明确定义时的合理方法。
- B. 快速需要工作计划的好方法。
- C. 用于拥有大型开发团队的项目的最佳方法。
- D. 一种很少使用的老式模型。

2. The incremental model of software development is

- A. A reasonable approach when requirements are well defined.
- B. A good approach when a working core product is required quickly.
- C. The best approach to use for projects with large development teams.
- D. A revolutionary model that is not used for commercial products.

2. 软件开发的增量模型是

- A. 当需求明确定义时的合理方法。
- B. 快速需要工作核心产品时的好方法。
- C. 用于拥有大型开发团队的项目的最佳方法。
- D. 一种不用于商业产品的革命性模型。

3. Evolutionary software process models

- A. Are iterative in nature.
- B. Can easily accommodate product requirements changes.
- C. Do not generally produce throwaway systems.
- D. All of the above.

3. 进化软件过程模型 A. 本质上是迭代的。

- B. 可以轻松适应产品要求的变化。
- C. 一般不生产一次性系统。
- D. 以上全部。

4. The prototyping model of software development is

- A. A reasonable approach when requirements are well defined.
- B. A useful approach when a customer cannot define requirements clearly.
- C. The best approach to use for projects with large development teams.
- D. A risky model that rarely produces a meaningful product.

4. 软件开发的原型模型是

- A. 当需求明确定义时的合理方法。
- B. 当客户无法明确定义要求时的有用方法。
- C. 用于拥有大型开发团队的项目的最佳方法。
- D. 一种很少产生有意义产品的风险模型。

5. The spiral model of software development

- A. Ends with the delivery of the software product.
- B. Is more chaotic than the incremental model.
- C. Includes project risks evaluation during each iteration.
- D. All of the above.

5. 软件开发的螺旋模型

- A. 结束软件产品的交付。 B. 比增量模型更混乱。
- C. 包括每次迭代期间的项目风险评估。 D. 以上全部。

6. The concurrent development model is

- A. Another name for concurrent engineering.
- B. Defines events that trigger engineering activity state transitions.
- C. Only used for development of parallel or distributed systems.
- D. Used whenever a large number of change requests are anticipated.
- E. Both a and b

6. 并发开发模型是 A. 并行工程的另一个名称。 B. 定义触发工程活动状态转换的事件。 C. 仅用于开发并行或分布式系统。 D. 每当预期有大量变更请求时使用。

E. a 和 b 两者

7. The component-based development model is

- A. Only appropriate for computer hardware design.
- B. Not able to support the development of reusable components.
- C. Dependent on object technologies for support.
- D. Not cost effective by known quantifiable software metrics.

7.基于组件的开发模型是

- A.仅适用于计算机硬件设计。
- B.无法支持可重用组件的开发。
- C.取决于对象技术的支持。
- D.已知的可量化软件指标不具成本效益。

8. The formal methods model of software development makes use of mathematical methods to

- A. Define the specification for computer-based systems.
- B. Develop defect free computer-based systems.
- C. Verify the correctness of computer-based systems.
- D. All of the above.

8.软件开发的形式化方法模型利用数学方法

- A.定义基于计算机的系统的规范。
- B.开发无缺陷的基于计算机的系统。
- C.验证基于计算机的系统的正确性。
- D.以上全部。

9. Which of these is not one of the phase names defined by the Unified Process model for software development?

- A. Inception phase
- B. Elaboration phase
- C. Construction phase
- D. Validation phase

9.其中哪一项不是统一过程模型为软件开发定义的阶段名称之一？

- A.初始阶段
- B.精化阶段
- C.施工阶段
- D.验证阶段

10. Which of these is not a characteristic of Personal Software Process?

- A. Emphasizes personal measurement of work product.
- B. Practitioner requires careful supervision by the project manager.
- C. Individual practitioner is responsible for estimating and

scheduling.

D. Practitioner is empowered to control quality of software work products.

10.以下哪项不是个人软件过程的特征？

- A.强调对工作产品的个人测量。
- B.从业者需要项目经理的仔细监督。
- C.个体从业者负责估计和安排。
- D.从业者有权控制软件工作产品的质量。

11. Which of these are objectives of Team Software Process?

- A. Accelerate software process improvement
- B. Allow better time management by highly trained professionals
- C. Build self-directed software teams
- D. Show managers how to reduce costs and sustain quality
- E. Both b and c

11.哪些是团队软件过程的目标？

- A.加速软件过程改进
- B.由训练有素的专业人员提供更好的时间管理
- C.建立自我导向的软件团队
- D.向经理们展示如何降低成本和保持质量
- E. b 和 c 都有

12. Process technology tools allow software organizations to compress schedules by skipping unimportant activities.

- A. True
- B. False

12.流程技术工具允许软件组织通过跳过不重要的活动来压缩计划。

13. It is generally accepted that one cannot have weak software processes and create high quality end products.

- A. True
- B. False

13.人们普遍认为，不能拥有薄弱的软件流程并创造高质量的最终产品。

## 第 5 章

1. Agility is nothing more than the ability of a project team to respond rapidly to change.

A. True

B. False

1.敏捷只不过是项目团队快速响应变化的能力。

2. Which of the following is not necessary to apply agility to a software process?

A. Eliminate the use of project planning and testing

B. Only essential work products are produced

C. Process allows team to streamline tasks

D. Uses incremental product delivery strategy

2.将敏捷性应用于软件过程不需要以下哪项？

A.消除项目计划和测试的使用

B.只生产必要的工作产品

C.流程允许团队简化任务

D.使用增量产品交付策略

3. How do you create agile processes to manage unpredictability?

A. Requirements gathering must be conducted very carefully

B. Risk analysis must be conducted before planning takes place

C. Software increments must be delivered in short time periods

D. Software processes must adapt to changes incrementally

E. Both c and d

3.如何创建敏捷流程来管理不可预测性？

A.必须非常仔细地进行需求收集

B.必须在进行规划之前进行风险分析

C.软件增量必须在短时间内交付

D.软件过程必须逐步适应变化

E. c 和 d

4. In agile software processes the highest priorities is to satisfy the customer through early and continuous delivery of valuable software.

A. True

B. False

4.在敏捷软件过程中，最高优先级是通过早期和持续交付有价值的软件来满足客户。

5. In agile development it is more important to build software that meets the customers' needs today than worry about features that might be needed in the future.

A. True

B. False

5.在敏捷开发中，构建满足客户需求的软件比担心将来可能需要的功能更为重要。

6. What are the four framework activities found in the Extreme Programming (XP) process model?

A. analysis, design, coding, testing

B. planning, analysis, design, coding

C. planning, analysis, coding, testing

D. planning, design, coding, testing

6.极限编程（XP）过程模型中的四个框架活动是什么？

A.分析，设计，编码，测试

B.规划，分析，设计，编码

C.计划，分析，编码，测试

D.规划，设计，编码，测试

7. All agile process models conform to a greater or lesser degree to the principles stated in the "Manifesto for Agile Software Development".

A. True

B. False

7.所有敏捷流程模型都或多或少地符合“敏捷软件开发宣言”中所述的原则。

8. Which is not one of the key questions that is answered by each team member at each daily Scrum meeting?

A. What did you do since the last meeting?

B. What obstacles are you encountering?

C. What obstacles are you encountering?

D. What do you plan to accomplish by the next team meeting?

8. 每个团队成员在每次 Scrum 会议上都回答哪个关键问题？

A. 自上次会议以来你做了什么？

B. 你遇到了什么障碍？

C. 你遇到了什么障碍？

D. 你打算在下一次团队会议上完成什么？

9. The Dynamic Systems Development Method (DSDM) suggests a philosophy that is based on the Pareto principle (80% of the application can be delivered in 20% of the time required to build the complete application).

A. True

B. False

9. 动态系统开发方法 (DSDM) 提出了一种基于帕累托原则的理念 (80% 的应用程序可以在构建完整应用程序所需的 20% 的时间内交付)

10. Agile Modeling (AM) provides guidance to practitioner during which of these software tasks?

A. Analysis B. Design

C. Coding D. Testing

E. Both a and b

10. 敏捷建模 (AM) 为从业者提供了哪些软件任务的指导？

A. 分析 B. 设计

C. 编码 D. 测试

E. a 和 b 两者

11. Agile Unified Process uses the classic UP phased activities (inception, elaboration, construction, transition) to help the team visualize the overall process flow.

A. True

B. False

11. Agile Unified Process 使用经典的 UP 阶段活动 (开始, 详细说明, 构建, 转换) 来帮助团队可视化整个流程。

## 第 6 章

1. Human aspects of software engineering are not relevant in today's agile process models.

A. True

B. False

1. 软件工程的人性方面与当今的敏捷过程模型无关。

2. Which of the following is not an important trait of an effective software engineer?

A. Attentive to detail

B. Brutally honest

C. Follows process rule dogmatically

D. Resilient under pressure

2. 以下哪项不是有效软件工程师的重要特征？

A. 注重细节

B. 诚实诚实

C. 教条地遵循流程规则

D. 在压力下具有弹性

3. Group communication and collaboration are as important as the technical skills of an individual team member to the success of a team.

A. True

B. False

3. 团队沟通和协作与团队成员的技术技能同样重要。

4. Teams with diversity in the individual team member skill sets tend to be more effective than teams without this diversity.

A. True

B. False

4. 具有多样性的团队成员技能组的团队往往比没有这种多样性的团队更有效。

5. Which of the following can contribute to team toxicity?

A. Frenzied work atmosphere

B. Inadequate budget

C. Poorly coordinated software process

D. Unclear definition of team roles

E. a, b, d

5. 以下哪项可能导致团队毒性？

A. 疯狂的工作氛围

B. 预算不足

C. 协调不佳的软件过程

D. 团队角色定义不明确

E. a, b, d

6. Software engineering team structure is independent of problem complexity and size of the expected software products.

A. True

B. False

6. 软件工程团队结构独立于预期软件产品的问题复杂性和大小。

7. Agile teams are allowed to self-organize and make their own technical decisions.

A. True

B. False

7. 允许敏捷团队自行组织并做出自己的技术决策。

8. In XP a metaphor is used as a device to facilitate communications among customers, team members, and managers?

A. True

B. False

8. 在 XP 中，隐喻被用作促进客户，团队成员和经理之间通信的设备？



9. Using an established social media platform negates the need to be concerned about privacy or security.

A. True

B. False

9.使用已建立的社交媒体平台，无需担心隐私或安全。

10. Use of cloud services can speed up information sharing among software team members?

A. True

B. False

10.使用云服务可以加速软件团队成员之间的信息共享？

11. In collaborative development environments, metrics are used to reward and punish team members.

A. True

B. False

11.在协作开发环境中，度量标准用于奖励和惩罚团队成员。

12. Which of these factors complicate decision-making by global software teams

A. Complexity of problem

B. Different views of the problem

C. Law of unintended consequences

D. Risk associated with decision

E. All of the above.

12.这些因素中的哪一个使全球软件团队的决策变得复杂化

A.问题的复杂性

B.对问题的不同看法

C.意外后果的法律

D.与决策相关的风险

E.以上所有内容。

## 第 7 章

1. Software engineering principles have about a three year half-life.

A. True

B. False

1. 软件工程原理的半衰期约为三年。

2. Which of the following is not one of core principles of software engineering practice?

A. All design should be as simple as possible, but no simpler.

B. A software system exists only to provide value to its users.

C. Pareto principle (20% of any product requires 80% of the effort).

D. Remember that you produce others will consume

2. 以下哪项不是软件工程实践的核心原则之一？

答：所有设计应尽可能简单，但不能简单。

B. 软件系统的存在只是为了向用户提供价值。

C. 帕累托原则（任何产品的 20% 需要 80% 的努力）。

D. 记住，你生产的其他人会消费

3. Every communication activity should have a facilitator to make sure that the customer is not allowed to dominate the proceedings.

A. True

B. False

3. 每项沟通活动都应有一名协调人，以确保不允许客户主导诉讼程序。

4. The agile view of iterative customer communication and collaboration is applicable to all software engineering practice.

A. True

B. False

4. 迭代客户沟通和协作的敏捷视图适用于所有软件工程实践。

5. One reason to involve everyone on the software team in the planning activity is to

A. adjust the granularity of the plan

B. control feature creep

C. get all team members to "sign up" to the plan

D. understand the problem scope

5. 让每个人都参与规划活动的软件团队的一个原因是

A. 调整计划的粒度

B. 控制特征蠕变

C. 让所有团队成员“注册”到该计划

D. 了解问题范围

6. Project plans should not be changed once they are adopted by a team.

A. True

B. False

6. 项目计划一旦被团队采纳，就不应该改变。

7. Requirements models depict software in which three domains?

A. architecture, interface, component

B. cost, risk, schedule

C. information, function, behavior

D. None of the above

7. 需求模型描述了三个域的软件？

A. 架构，接口，组件

B. 成本，风险，进度

C. 信息，功能，行为

D. 以上都不是

8. The design model should be traceable to the requirements model?

A. True

B. False

8. 设计模型应该可以追溯到需求模型吗？

9. Teams using agile software practices do not generally create models.

A. True

B. False

9.使用敏捷软件实践的团队通常不会创建模型。

10. Which of the following is not one of the principles of good coding?

A. Create unit tests before you begin coding

B. Create unit tests before you begin coding

C. Refractor the code after you complete the first coding pass

D. Write self-documenting code, not program documentation

10.以下哪项不是良好编码的原则之一？

A.在开始编码之前创建单元测试

B.在开始编码之前创建单元测试

C.完成第一个编码过程后，对代码进行折射

D.编写自我记录代码，而不是程序文档

11. A successful test is one that discovers at least one as-yet undiscovered error.

A. True

B. False

11.一个成功的测试我发现至少一个尚未发现的错误。

12. Which of the following are valid reasons for collecting customer feedback concerning delivered software?

A. Allows developers to make changes to the delivered increment

B. Delivery schedule can be revised to reflect changes

C. Developers can identify changes to incorporate into next increment

D. All of the above

12.以下哪项是收集有关交付软件的客户反馈的正当理由？

A.允许开发人员对交付的增量进行更改

B.可以修改交货时间表以反映变化

C.开发人员可以识别要纳入下一个增量的变更

D.以上所有

13. Larger programming teams are always more productive than smaller teams.

A. True

B. False

13.较大的编程团队总是比小团队更有效率。

## 第 8 章

1. Requirements engineering is a generic process that does not vary from one software project to another.

A. True

B. False

1.需求工程是一个通用的过程，不会因软件项目而异。

2. During project inception the intent of the of the tasks are to determine

A. basic problem understanding

B. nature of the solution needed

C. people who want a solution

D. none of the above

E. a, b, c

2.在项目开始期间，任务的目的是确定

A.基本问题的理解 B.所需解决方案的性质

C.想要解决方案的人 D.以上都不是

E. a, b, c

3. Three things that make requirements elicitation difficult are problems of

A. budgeting

B. scope

C. understanding

D. volatility

E. b, c, d

3.使问题引出困难的三件事是问题

A.预算编制 B.范围 C.理解

D.波动性 E. b, c, d

4. A stakeholder is anyone who will purchase the completed software system under development.

A. True

B. False

4.利益相关者是将购买正在开发的完整软件系统的人。

5. It is relatively common for different customers to propose conflicting requirements, each arguing that his or her version is the right one.

A. True

B. False

5.不同的客户提出相互冲突的要求是相对常见的，每个要求都认为他或她的版本是正确的。

6. Which of the following is not one of the context-free questions that would be used during project inception?

A. What will be the economic benefit from a good solution?

B. Who is behind the request for work?

C. Who will pay for the work?

D. Who will use the solution?

6.以下哪项不是项目启动期间将使用的无上下文问题之一？

A.良好解决方案的经济效益是什么？

B.谁是工作要求的背后？

C.谁来支付工作？

D.谁将使用该解决方案？

7. Non-functional requirements can be safely ignored in modern software development projects.

A. True

B. False

7.现代软件开发项目中可以安全地忽略非功能性需求。

8. In collaborative requirements gathering the facilitator

A. arranges the meeting place

B. can not be a customer

C. controls the meeting

D. must be an outsider

8.在协作要求中收集协调人

A.安排会面地点 B.不能成为客户

C.控制会议 D.必须是局外人

9. Which of the following is not one of the requirement classifications used in Quality Function Deployment (QFD)?

A. exciting B. expected C. mandatory D. normal

9. 以下哪项不是质量功能部署 (QFD) 中使用的需求分类之一?

A. 令人兴奋 B. 预期 C. 强制性 D. 正常

10. The work products produced during requirement elicitation will vary depending on the

A. size of the budget.  
B. size of the product being built.  
C. software process being used.  
D. stakeholders needs.

E. both a and b

10. 在要求引出期间产生的工作产品将根据具体情况而有所不同

A. 预算的大小。 B. 正在建造的产品尺寸。  
C. 正在使用的软件过程。 D. 利益相关者需求 E. a 和 b

11. User stories are complete descriptions the user needs and include the non-functional requirements for a software increment.

A. True B. False

11. 用户故事是用户需要的完整描述, 包括软件增量的非功能性要求。

12. Developers and customers create use-cases to help the software team understand how different classes of end-users will use functions.

A. True B. False

12. 开发人员和客户创建用例, 以帮助软件团队了解不同类别的最终用户将如何使用功能。

13. Use-case actors are always people, never system devices.

A. True B. False

13. 用例演员总是人, 而不是系统设备。

14. The result of the requirements engineering task is an analysis model that defines which of the following problem domain(s)?

A. information B. functional  
C. behavioral D. all of the above

14. 需求工程任务的结果是一个分析模型, 它定义了以下哪个问题域?

A. 信息 B. 功能性 C. 行为 D. 以上全部

15. Analysis patterns facilitate the transformation of the analysis model into a design model by suggesting reliable solutions to common problems.

A. True B. False

15. 分析模式通过建议可靠的常见问题解决方案, 促进分析模型转变为设计模型。

16. In agile process models requirements engineering and design activities are interleaved.

A. True B. False

16. 在敏捷过程模型中, 需求工程和设计活动是交错的。

17. In win-win negotiation, the customer's needs are met even though the developer's need may not be.

A. True B. False

17. 在双赢谈判中, 即使开发人员的需求可能不是, 也满足了客户的需求。

18. In requirements validation the requirements model is reviewed to ensure its technical feasibility.

A. True B. False

18. 在需求验证中, 对需求模型进行审查, 以确保其技术可行性。

19. The most common reason for software project failure is lack of functionality.

A. True B. False

19. 软件项目失败的最常见原因是缺乏功能

## 第 10 章

1. Which of these is not an element of a requirements model?

- A. Behavioral elements    B. Class-based elements  
C. Data elements        D. Scenario-based elements

1. 哪些不是需求模型的元素？

- A. 行为要素    B. 基于类的元素  
C. 数据要素    D. 基于情景的要素

2. Which of the following is not an objective for building a requirements model?

- A. define set of software requirements that can be validated  
B. describe customer requirements  
C. develop an abbreviated solution for the problem  
D. establish basis for software design

2. 以下哪项不是构建需求模型的目标？

- A. 定义可以验证的软件需求集  
B. 描述客户要求  
C. 为问题制定缩写解决方案  
D. 建立软件设计基础

3. Object-oriented domain analysis is concerned with the identification and specification of reusable capabilities within an application domain.

- A. True    B. False

3. 面向对象的域分析涉及应用程序域内可重用功能的识别和规范。

4. In structured analysis models focus on the structure of the classes defined for a system along with their interactions.

- A. True  
B. False

4. 在结构化分析模型中，重点关注为系统定义的类的结构及其交互。

5. Creation and refinement of use cases is an important part of scenario-based modeling.

- A. True    B. False

5. 如果是基于场景的建模的重要部分，则创建和完善用例。

6. It is important to consider alternative actor interactions when creating a preliminary use case.

- A. True    B. False

6. 在创建初步用例时，考虑替代的参与者交互很重要。

7. Brainstorming is one technique that may be used to derive a complete set of use case exceptions.

- A. True    B. False

7. 头脑风暴是一种可用于派生一整套用例异常的技术。

8. In many cases there is no need to create a graphical representation of a usage scenario.

- A. True    B. False

8. 在许多情况下，无需创建使用方案的图形表示。

9. UML activity diagrams are useful in representing which analysis model elements?

- A. Behavioral elements  
B. Class-based elements  
C. Flow-based elements  
D. Scenario-based elements

9. UML 活动图在表示哪些分析模型元素时很有用？

- A. 行为要素                      B. 基于类的元素  
C. 基于流动的要素              D. 基于情景的要素

10. UML swimlane diagrams allow you to represent the flow of activities by showing the actors having responsibility for creating each data element.

- A. True    B. False

10. UML swimlane 图允许您通过显示负责创建每个数据元素的参与者来表示活动流。

## 第 10 章

1. Which of the following should be considered as candidate objects in a problem space?

- A. events      B. people  
C. structures    D. all of the above

1. 下列哪一项应被视为问题空间中的候选对象？

- A. 事件    B. 人    C. 结构    D. 以上全部

2. In the grammatical parse of a processing narrative the nouns become object candidates in the analysis model.

- A. True  
B. False

2. 在处理叙事的语法分析中，名词成为分析模型中的候选对象。

3. Attributes are chosen for an object by examining the problem statement and identifying the entities that appear to be related.

- A. True  
B. False

3. 通过检查问题陈述并识别看似相关的实体，为对象选择属性。

4. Which of the following is not one of the broad categories used to classify operations?

- A. computation  
B. data manipulation  
C. event monitors  
D. transformers

4. 以下哪一项不是用于对业务进行分类的广泛类别之一？

- A. 计算    B. 数据处理    C. 事件监视器    D. 变形金刚

5. Collaborators in CRC modeling are those classes needed to fulfill a responsibility on another card.

- A. True  
B. False

5. CRC 建模中的合作者是在另一张卡上履行责任所需的那些类。

6. Which of the following items does not appear on a CRC card?

- A. class collaborators  
B. class name  
C. class reliability  
D. class responsibilities

6. CRC 卡上没有出现以下哪些项目？

- A. 班级合作者    B. 班级名称    C. 班级可靠性    D. 班级责任

7. Class responsibilities are defined by

- A. its attributes only  
B. its collaborators  
C. its operations only  
D. both its attributes and operations

7. 职业责任由以下人员定义

- A. 仅限其属性    B. 其合作者    C. 仅限其运作    D. 它的属性和操作

8. A stereotype is the basis for class reuse in UML modeling.

- A. True  
B. False

8. 构造型是 UML 建模中类重用的基础。

9. An analysis package involves the categorization of analysis model elements into useful groupings.

- A. True  
B. False

9. 分析包涉及将分析模型元素分类为有用的分组。

## 第 11 章

1. The behavior modeling is only used in the analysis of real-time systems. 行为建模仅用于实时系统的分析。

A. True     B. False

2. For purposes of behavior modeling an event occurs whenever 出于行为建模的目的，每当发生事件时

A. a state and process exchange information.

B. the system and an actor exchange information.

C. two actors exchange information.

D. two objects exchange information.

A. 状态和流程交换信息。     B. 系统与演员交换信息。

C. 两个演员交换信息。     D. 两个对象交换信息。

3. For purposes of behavior modeling a state is any

A. consumer or producer of data.

B. data object hierarchy.

C. observable mode of behavior.

D. well defined process.

3. 出于行为建模的目的，状态是任意的     A. 数据的消费者或生产者。

B. 数据对象层次结构。     C. 可观察的行为模式。     D. 定义明确的过程。

4. The state transition diagram 状态转换图

A. depicts relationships between data objects

B. depicts functions that transform the data flow

C. indicates how data are transformed by the system

D. indicates system reactions to external events

A. 描述数据对象之间的关系     B. 描述了转换数据流的函数

C. 表示系统如何转换数据     D. 表示系统对外部事件的反应

5. The UML sequence diagram shows the order in which system events are processed. UML 序列图显示了处理系统事件的顺序。

A. True     B. False

6. Analysis patterns are discovered, they are not explicitly created. 发现分析模式，未明确创建它们。 A. True     B. False

7. It is not possible to justify the time required for mobile app requirements analysis. 无法证明移动应用程序需求分析所需的时间。     A. True     B. False

8. Which is not one of the analysis activities that is used to create a complete analysis model?

A. Configuration analysis     B. Content analysis

C. Functional analysis     D. Market analysis

8. 哪个不是用于创建完整分析模型的分析活动之一？

A. 配置分析     B. 内容分析     C. 功能分析     D. 市场分析

9. Content objects are extracted from use cases by examining the scenario description for direct or indirect content references. 通过检查直接或间接内容引用的场景描述，从用例中提取内容对象。 A. True     B. False

10. What are the elements of a WebApp interaction model? WebApp 交互模型的要素是什么？

A. activity diagrams, sequence diagrams, state diagrams, interface prototype 活动图，序列图，状态图，接口原型

B. activity diagrams, collaboration diagrams, sequence diagrams, state diagrams 活动图，协作图，序列图，状态图

C. use-cases, sequence diagrams, state diagrams, interface prototype 用例，序列图，状态图，接口原型

D. use-cases, sequence diagrams, state diagrams, sequence diagrams 用例，序列图，状态图，序列图

11. UML activity diagrams can be used to represent the user observable functionality delivered by the WebApp as well as the operations contained in each analysis class. UML 活动图可用于表示 WebApp 提供的用户可观察功能以及每个分析类中包含的操作。 A. True     B. False

12. Configuration analysis focuses on the architecture of the user's web browsing environment. 配置分析侧重于用户 Web 浏览环境的体系结构。 A. True     B. False



## 第 12 章

1. Which of the following are areas of concern in the design model? 以下哪些是设计模型中关注的领域?

- A. architecture    B. data    C. interfaces  
D. project scope    E. a, b, c

A. 架构    B. 数据    C. 接口    D. 项目范围    E. a, b, c

2. The importance of software design can be summarized in a single word

2. 软件设计的重要性可以用一个词来概括

- A. accuracy    B. complexity    C. efficiency    D. quality  
A. 准确性    B. 复杂性    C. 效率    D. 质量

3. Which of these are characteristics of a good design?

- A. exhibits strong coupling between its modules  
B. implements all requirements in the analysis model  
C. includes test cases for all components  
D. provides a complete picture of the software  
E. b and d

3. 哪些是优秀设计的特征?

- A. 展示了其模块之间的强耦合    B. 实现分析模型中的所有要求  
C. 包括所有组件的测试用例    D. 提供软件的完整图片    E. b 和 d

4. Which of the following is not a characteristic common to all design methods?

- A. configuration management 配置管理  
B. functional component representation 功能组件表示  
C. quality assessment guidelines 质量评估指南  
D. refinement heuristics 精炼启发式

4. 以下哪项不是所有设计方法的共同特征?

5. What types of abstraction are used in software design? 软件设计中使用了哪些类型的抽象?

- A. control    B. data    C. environmental    D. procedural  
E. a, b, d

A. 控制    B. 数据    C. 环境    D. 程序性的    E. a, b, d

6. Which of the following can be used to represent the architectural design of a piece of software?

- A. Dynamic models    B. Functional models  
C. Structural models    D. All of the above

6. 以下哪项可用于表示软件的架构设计?

A. 动态模型    B. 功能模型    C. 结构模型    D. 以上所有

7. Design patterns are not applicable to the design of object-oriented software?

- A. True    B. False

7. 设计模式不适用于面向对象软件的设计?

8. Since modularity is an important design goal it is not possible to have too many modules in a proposed design.    A. True    B. False

8. 由于模块化是一个重要的设计目标, 因此在提议的设计中不可能有太多的模块。

9. Information hiding makes program maintenance easier by hiding data and procedure from unaffected parts of the program.    A. True    B. False

9. 信息隐藏通过隐藏来自程序未受影响部分的数据和过程, 使程序维护更容易。

10. Cohesion is a qualitative indication of the degree to which a module

- A. can be written more compactly.  
B. focuses on just one thing.  
C. is able to complete its function in a timely manner.  
D. is connected to other modules and the outside world.

10. 凝聚力是模块程度的定性指示

- A. 可以写得更紧凑。  
B. 只关注一件事。  
C. 能够及时完成其职能。  
D. 连接到其他模块和外部世界。

11. Coupling is a qualitative indication of the degree to which a module 耦合是模块程度的定性指示

- A. can be written more compactly.
- B. focuses on just one thing.
- C. is able to complete its function in a timely manner.
- D. is connected to other modules and the outside world.

A. 可以写得更紧凑。 B. 只关注一件事。  
C. 能够及时完成其职能。 D. 连接到其他模块和外部世界。

12. When using structured design methodologies the process of stepwise refinement is unnecessary.

- A. True
- B. False

12. 当使用结构化设计方法时，不需要逐步细化的过程。

13. Software designs are refactored to allow the creation of software that is easier to integrate, easier to test, and easier to maintain. A. True B. False

13. 软件设计经过重构，可以创建更易于集成，更易于测试和更易于维护的软件。

14. Which of the following is not one of the five design class types 以下哪一项不是五种设计类类型之一

- A. Business domain classes
- B. Entity classes
- C. Process classes
- D. User interface classes

A. 业务领域类 B. 实体类 C. 流程类 D. 用户界面类

15. Which design model elements are used to depict a model of information represented from the user's view?

- A. Architectural design elements
- B. Component-level design elements
- C. Data design elements
- D. Interface design elements

15. 使用哪些设计模型元素来描述用户视图所代表的信息模型？

A. 建筑设计元素 B. 组件级设计元素  
C. 数据设计要素 D. 界面设计元素

16. Which design is equivalent to the floor plan of a house? 哪种设计相当于房屋的平面图？

- A. Architectural design
- B. Component-level design
- C. Data design
- D. Interface design

A. 建筑设计 B. 组件级设计 C. 数据设计 D. 界面设计

17. Which design model is equivalent to the detailed drawings of the access points and external utilities for a house?

- A. Architectural design
- B. Component-level design
- C. Data design
- D. Interface design

17. 哪种设计模型等同于房屋的接入点和外部设施的详细图纸？

A. 建筑设计  
B. 组件级设计  
C. 数据设计  
D. 界面设计

18. Which design model is equivalent to a set of detailed drawings for each room in a house?

- A. Architectural design
- B. Component-level design
- C. Data design
- D. Interface design

18. 哪种设计模型相当于房屋内每个房间的一套详细图纸？

A. 建筑设计  
B. 组件级设计  
C. 数据设计  
D. 界面设计

19. The deployment design elements specify the build order for the software components.

- A. True
- B. False

19. 部署设计元素指定软件组件的构建顺序。

### 第 13 章

1. The best representation of system architecture is an operational software prototype. 系统架构的最佳表示是操作软件原型 A. True B. False

2. The architectural representations can be an enabler for communication among project stakeholders. 建筑表示可以成为项目利益相关者之间沟通的推动者 A. True B. False

3. An architectural description is often documented using an architecture template. 通常使用体系结构模板记录体系结构描述。 A. True B. False

4. An architectural decision is often documented using an architecture decision description template. 通常使用体系结构决策描述模板记录体系结构决策 A. True B. False

5. An architectural genre will often dictate the architectural approach that may used for the structure to be built. 建筑类型通常会决定可用于构建结构的架构方法。 A. True B. False

6. An architectural style encompasses which of the following elements? 建筑风格包含以下哪些元素  
A. constraints B. set of components  
C. semantic models D. syntactic models E. a, b, c  
A. 约束 B. 组件集 C. 语义模型 D. 句法模型 E. a, b, c

7. To determine the architectural style or combination of styles that best fits the proposed system, requirements engineering is used to uncover  
A. algorithmic complexity B. characteristics and constraints  
C. control and data D. design patterns

7. 要确定最适合所提议系统的架构风格或样式组合, 需要使用需求工程来揭示  
A. 算法复杂性 B. 特征和约束 C. 控制和数据 D. 设计模式

8. Before an architectural pattern can be chosen for use in a specific system it must have a code implementation to facilitate its reuse.  
A. True B. False

8. 在可以选择在特定系统中使用架构模式之前, 它必须具有代码实现以便于其重用。

9. The criteria used to assess the quality of an architectural design should be based on system  
A. accessibility B. control C. data  
D. implementation E. b and c

9. 用于评估建筑设计质量的标准应基于系统  
A. 可访问性 B. 控制 C. 数据 D. 实施 E. b 和 c

10. Software architectural considerations often interact with each other and moderate each other.  
A. True B. False

10. 软件体系结构考虑通常彼此交互并相互调节。

11. Developer notes are not a reliable means of documenting architectural decisions  
A. True B. False

11. 开发人员注释不是记录架构决策的可靠方法

12. During process of modeling the system in context, systems that interact with the target system are represented as  
A. Peer-level systems  
B. Subordinate systems  
C. Superordinate systems  
D. Working systems  
E. a, b, c

12. 在上下文中对系统建模的过程中, 与目标系统交互的系统表示为  
A. 对等级系统 B. 下属系统 C. 上级系统 D. 工作系统  
E. a, b, c

13. Once selected, archetypes always need to be refined further as architectural design proceeds.

A. True

B. False

13.一旦选定，随着建筑设计的进行，原型总是需要进一步完善。

14. Which of the following is not an example of infrastructure components that may need to be integrated into the software architecture?

A. Communications components

B. Database components

C. Interface components

D. Memory management components

14.以下哪项不是可能需要集成到软件架构中的基础架构组件的示例？

A.通信组件 B.数据库组件 C.接口组件 D.内存管理组件

15. In the architecture trade-off analysis method the architectural style should be described using the

A. data flow view B. module view

C. process view D. user view E. a, b, c

15.在架构权衡分析方法中，应该使用 the 来描述架构风格

A.数据流视图 B.模块视图 C.流程视图 D.用户视图

E. a, b, c

16. A useful technique for evaluating the overall complexity of a proposed architecture is to look at the component

A. cohesion B. flow dependencies

C. sharing dependencies D. size E. b and c

16.评估所提出的体系结构的总体复杂性的有用技术是查看该组件

A.凝聚力 B.流依赖性 C.共享依赖关系 D.大小 E. b 和 c

17. Software architects need to create consensus among software team members and other stakeholders.

A. True

B. False

17.软件架构师需要在软件团队成员和其他利益相关者之间建立共识。

18. Pattern-based architectural reviews can be useful for project with short build cycles and volatile requirements.

A. True

B. False

18.基于模式的架构评审对于具有较短构建周期和不稳定要求的项目非常有用。

19. Static architectural conformance checking assesses whether or not the source code matches the user visible requirements.

A. True

B. False

19.静态体系结构一致性检查评估源代码是否与用户可见要求匹配。

20. Architectural design has no role in agile software process models.

A. True

B. False

20.架构设计在敏捷软件过程模型中没有任何作用。

## 第 14 章

1. In the most general sense a component is a modular building block for computer software. 在最一般意义上, 组件是用于计算机软件的模块化构建块 A. True B. False

2. In the context of object-oriented software engineering a component contains

- A. attributes and operations
- B. instances of each class
- C. roles for each actor (device or user)
- D. set of collaborating classes

2. 在面向对象的软件工程中, 一个组件包含

- A. 属性和操作
- B. 每个班级的实例
- C. 每个参与者 (设备或用户) 的角色
- D. 一套合作课程

3. In traditional software engineering modules must serve in which of the following roles?

- A. Control component
- B. Infrastructure component
- C. Problem domain component
- D. All of the above

3. 在传统软件工程中, 模块必须服务于以下哪个角色?

- A. 控制组件
- B. 基础设施部分
- C. 问题域组件
- D. 以上所有

4. Software engineers always need to create components from scratch in order to meet customer expectations fully. 软件工程师总是需要从头开始整理组件, 以便充分满足客户的期望。 A. True B. False

5. Which of the following is not one of the four principles used to guide component-level design?

- A. Dependency Inversion Principle
- B. Interface Segregation Principle
- C. Open-Closed Principle
- D. Parsimonious Complexity Principle

5. 以下哪一项不是用于指导组件级设计的四项原则之一?

- A. 依赖倒置原则
- B. 界面隔离原则
- C. 开放原则
- D. 简约复杂性原则

6. The use of stereotypes can help identify the nature of components at the detailed design level.

- A. True
- B. False

6. 刻板印象的使用有助于在详细设计层面确定组件的性质。

7. Classes and components that exhibit functional, layer, or communicational cohesion are relatively easy to implement, test, and maintain. 具有功能, 层次或通信内聚力的类和组件相对易于实现, 测试和维护。

- A. True
- B. False

8. Software coupling is a sign of poor architectural design and can always be avoided in every system.

- A. True
- B. False

8. 软件耦合是架构设计不佳的标志, 在每个系统中都可以避免。

9. In component design elaboration requires which of the following elements to be describe in detail?

- A. Algorithms
- B. Attributes
- C. Interfaces
- D. Operations
- E. b, c, d

9. 在组件设计细化中, 需要详细描述以下哪些元素?

- A. 算法
- B. 属性
- C. 接口
- D. 行动
- E. b, c, d

10. In component-level design persistent data sources refer to 在组件级设计中, 持久数据源是指

- A. Component libraries
- B. Databases
- C. Files
- D. All of the above
- E. b and c

A. 组件库 B. 数据库 C. 档案 D. 以上所有 E. b 和 c

11. WebApp content design at the component level focuses on content objects and the manner in which they interact.

- A. True

- B. False

11. 组件级别的 WebApp 内容设计侧重于内容对象及其交互方式。

12. A WebApp functional architecture describes the key functional components and how they interact with each other. WebApp 功能体系结构描述了关键功能组件以及它们如何相互交互。

A. True B. False

13. Component-level design for mobile apps is not any different from component-based design for Web apps. 移动应用程序的组件级设计与 Web 应用程序的基于组件的设计没有任何不同。

A. True B. False

14. Which of these constructs is used in structured programming? 结构化编程中使用了哪些结构？

A. branching B. condition C. repetition

D. sequence E. b, c, d

A.分支 B.条件 C.重复 D.序列 E. b, c, d

15. In component-based software engineering, the development team examines the requirements to see which are amenable to composition, rather than construction, before beginning detailed design tasks. 在基于组件的软件工程中，开发团队在开始详细设计任务之前检查要求，以了解哪些要求合成，而不是构造。

A. True B. False

16. Which of the following is not one of the major activities of domain engineering?

以下哪项不是域名工程的主要活动之一

A. analysis B. construction

C. dissemination D. validation

A.分析 B.建设 C.传播 D.验证

17. Which of the following factors would not be considered during component qualification?

A. application programming interface (API)

B. development and integration tools required

C. exception handling D. testing equipment required

17. 部件认证期间不考虑哪因素 A. 应用程序编程接口 (API)

B. 所需的开发和集成工具 C. 异常处理 D. 所需的测试设备

18. Which of the following is a technique used for component wrapping?

A. black-box wrapping B. clear-box wrapping

C. gray-box wrapping D. white-box wrapping

18. 以下是用于组件包装的技术？

A. 黑盒包装

B. 透明包装

C. 灰盒包装

D. 白盒包装

19. Which of the following is not one of the issues that form a basis for design for reuse?

A. object-oriented programming

B. program templates

C. standard data

D. standard interface protocols

19. 以下哪一项不是构成重用设计基础的问题之一？

A. 面向对象的编程 B. 程序模板

C. 标准数据 D. 标准接口协议

20. In a reuse environment, library queries are often characterized using the \_\_\_\_\_ element of the 3C Model.

A. concept B. content C. context D. all of the above

20. 在重用环境中，库查询通常使用 3C 模型的\_\_\_\_\_元素进行表征。

A. 概念 B. 内容 C. 背景 D. 以上所有内容

## 第 15 章

1. Which of the following interface design principles does not allow the user to remain in control of the interaction with a computer? 以下哪种界面设计原则不允许用户继续控制与计算机的交互

- A. allow interaction to interruptible 允许互动到可中断
- B. allow interaction to be undoable 允许交互是可撤销的
- C. hide technical internals from casual users 隐藏临时用户的技术内部
- D. only provide one rigidly defined method for accomplishing a task 仅提供一种严格定义的方法来完成任

2. Which of the following interface design principles reduce the user's memory load?

- A. define intuitive shortcuts
- B. disclose information in a progressive fashion
- C. establish meaningful defaults
- D. provide an on-line tutorial E. a, b, c

2. 以下哪种接口设计原则会降低用户的内存负载？

- A. 定义直观的快捷方式 B. 以渐进的方式披露信息
- C. 建立有意义的默认值 D. 提供在线教程 E. a, b, c

3. The reason for reducing the user's memory load is make his or her interaction with the computer quicker to complete. 减少用户内存负载的原因是使 he 或 she 与计算机的交互更快完成 A. True B. False

4. Interface consistency implies that 接口一致性意味着

- A. each application should have its own distinctive look and feel 每个应用程序都应该有自己独特的外观和感觉
- B. input mechanisms remain the same throughout the application 整个申请中的输入机制保持不变
- C. navigational methods are context sensitive 导航方法是上下文敏感的
- D. visual information is organized according to a design standard 视觉信息根据设计标准组织 E. b and d

5. If past interactive models have created certain user expectations it is not generally good to make changes to the model. 如果过去的交互模型已经创建了某些用户期望, 那么对模型进行更改通常并不好 A. True B. False

6. Which model depicts the profile of the end users of a computer system 哪个模型描述了计算机系统最终用户概况

- A. design model B. implementation model
- C. user model D. user's model
- A. 设计模型 B. 实施模式 C. 用户模型 D. 用户的模型

7. Which model depicts the image of a system that an end user creates in his or her head? 哪个模型描绘了最终用户在他或她的头脑中创建的系统的图像？

- A. design model B. user model
- C. system model D. system perception
- A. 设计模型 B. 用户模型 C. 系统模型 D. 系统感知

8. Which model depicts the look and feel of the user interface along with all supporting information?

- A. implementation model B. user model
- C. user's model D. system perception

8. 哪个模型描述了用户界面的外观和所有支持信息？

- A. 实施模式 B. 用户模型 C. 用户的模型 D. 系统感知

9. Which of these framework activities is not normally associated with the user interface design processes?

- A. cost estimation
- B. interface construction
- C. interface validation
- D. user and task analysis

9. 这些框架活动中的哪一个通常与用户界面设计过程无关？

- A. 成本估算
- B. 界面构造
- C. 界面验证
- D. 用户和任务分析

10. Which approach(es) to user task analysis can be useful in user interface design?

- A. have users indicate their preferences on questionnaires
- B. rely on the judgement of experienced programmers
- C. study existing computer-based solutions
- D. observe users performing tasks manually

E. c and d

10. 用户任务分析的哪种方法在用户界面设计中很有用？

- A. 让用户在问卷表明他们的偏好
- B. 依靠有经验的程序员的判断
- C. 研究现有的基于计算机的解决方案
- D. 观察用户手动执行任务
- E. c 和 d

11. Object-oriented analysis techniques can be used to identify and refine user task objects and actions without any need to refer to the user voice. 面向对象的分析技术可用于识别和优化用户任务对象和动作，而无需参考用户语音

A. True B. False

12. The computer's display capabilities are the primary determinant of the order in which user interface design activities are completed. 计算机的显示功能是完成用户界面设计活动顺序的主要决定因素

A. True B. False

13. It is sometimes possible that the interface designer is constrained by environmental factors that mitigate against ease of use for many users. 有时候，界面设计者可能受到环境因素的限制，这些环境因素可以减轻许多用户的易用性

A. True B. False

14. One means of defining user interface objects and actions is to conduct a grammatical parse of the user scenario. 定义用户界面对象和动作的一种方法是进行用户场景的语法分析

A. True B. False

15. Interface design patterns typically include a complete component-level design (design classes, attributes, operations, and interfaces). 接口设计模式通常包括完整的组件级设计（设计类，属性，操作和接口）

A. True B. False

16. Several common design issues surface for almost every user interface including

- A. adaptive user profiles
- B. error handling
- C. resolution of graphics displays
- D. system response time

E. b and d

16. 几乎每个用户界面都有几个常见的设计问题，包括：

- A. 自适应用户档案
- B. 错误处理
- C. 图形显示的分辨率
- D. 系统响应时间
- E. b 和 d

17. It is more important to capture the user's attention with flashy features than ergonomically sound screen layouts when building a WebApp.

A. True B. False

17. 在构建 WebApp 时，使用华而不实的功能捕获用户的注意力比使用符合人体工程学的声音屏幕布局更重要。

18. Several usability measures can be collected while observing users interacting with a computer system including

- A. down time for the application
- B. number of user errors
- C. software reliability
- D. time spent looking at help materials

E. b and d

18. 可以收集若干可用性措施，同时观察与计算机系统交互的用户，包括

- A. 应用程序的停机时间
- B. 用户错误的数量
- C. 软件可靠性
- D. 花在寻找帮助材料上的时间
- E. b 和 d



## 第 16 章

1. Which of the following is not one of the elements of a design pattern? 以下哪一项不是设计模式的要素之一

A. context B. environment C. problem D. solution

A.背景 B.环境 C.问题 D.解决方案

2. RubberNecking is an example of a classic generative pattern. RubberNecking 是典型生成模式的一个例子

A. True B. False

3. A frame work is a reusable mini-architecture that serves as a foundation which other design patterns can be applied? 框架工作是一种可重复使用的迷你架构, 可以作为其他设计模式应用的基础吗 A. True B. False

4. Finding patterns built by others that address design problems is often more difficult than recognizing patterns in the application to be built. 在构建应用程序中识别模式时, 查找由其他人构建的解决设计问题的模式通常更加困难 A. True B. False

5. A pattern language 模式语言

A. encompasses a collection of patterns

B. is implemented using hypertext

C. resembles the structure of natural languages

D. None of the above

A.包含一系列模式 B.使用超文本实现

C.类似于自然语言的结构 D.以上都不是

6. The concepts and techniques discussed for \_\_\_\_\_ can be used in the conjunction with a pattern-based approach. 为\_\_\_\_\_讨论的概念和技术可以与基于模式的方法结合使用。

A. Architectural design B. Component-level design

C. User interface design D. All of the above

A.建筑设计 B.组件级设计 C.用户界面设计 D.以上所有

7. It is important to reduce the coupling among design patterns so that they can be treated as independent entities. 减少设计模式之间的耦合非常重要, 这样它们才能被视为独立的实体 A. True B. False

8. Real life design solutions may not always lend themselves to a top-down approach. 现实生活中的设计解决方案可能并不总是适合自上而下的方法

A. True

B. False

9. Which of the following problem types are used to label columns in a pattern organizing table?

A. Business B. Context C. Database

D. Infrastructure E. c and d

9.以下哪种问题类型用于标记模式组织表中的列?

A. 业务 B.背景 C.数据库 D.基础设施 E. c 和 d

10. Most mistakes in pattern-based design can be avoided by judicious use of review techniques.

A. True B. False

10.通过明智地使用审查技术, 可以避免基于模式的设计中的大多数错误。

11. Before choosing an architectural design pattern it must be assessed for its appropriateness to the application and overall architectural style. 在选择建筑设计模式之前, 必须评估其对应用和整体建筑风格的适用性

A. True B. False

12. Unlike architectural patterns, component-level design patterns may be applied to solve subproblems without regard to system context.

A. True B. False

12.与架构模式不同, 可以应用组件级设计模式来解决子问题, 而不考虑系统上下文

13. Most user interface design patterns fall within one of \_\_\_\_ categories of patterns.

大多数用户界面设计模式属于\_\_\_\_类别的模式之一

A. 5    B. 10    C. 25    D. 100

14. WebApp design patterns can be classified by considering which of the dimensions listed below?

- A. Aesthetics
- B. Design focus
- C. Granularity
- D. Usability

E. b and c

14. WebApp 设计模式可以通过考虑下面列出的哪个维度进行分类?

A. 美学   B. 设计重点   C. 粒度   D. 可用性   E. b 和 c

15. Which of the following are levels of design focus that can be used to categorize WebApp patterns?

- A. Behavioral patterns
- B. Functional patterns
- C. Layout patterns
- D. Navigation patterns

E. b and d

15. 以下哪些是可用于对 WebApp 模式进行分类的设计重点级别?

- A. 行为模式
- B. 功能模式
- C. 布局模式
- D. 导航模式
- E. b 和 d

16. Which of the levels of granularity that can be used to describe WebApp patterns?

- A. Architectural patterns
- B. Component patterns
- C. Design patterns
- D. Interactions patterns

E. a, b, c

16. 可以使用哪种粒度级别来描述 WebApp 模式?

- A. 建筑模式
- B. 组件模式
- C. 设计模式
- D. 相互作用模式
- E. a, b, c

17. Mobile app user interface patterns can be represented as a collection of best of breed screen images.

- A. True
- B. False

17. 移动应用程序用户界面模式可以表示为最佳屏幕图像的集合。

## 第 17 章

1. Which of the following characteristics should not be used to assess the quality of a WebApp?

- A. aesthetics B. reliability  
C. maintainability D. usability

1. 不应使用以下哪些特性来评估 WebApp 的质量?

- A. 美学 B. 可靠性 C. 可维护性 D. 可用性

2. Which of the following are design goals for every WebApp?

- A. Simplicity B. Consistency C. Navigability  
D. Visual appeal E. All of the above.

2. 以下哪项是每个 WebApp 的设计目标?

- A. 简单 B. 一致性 C. 导航性 D. 视觉吸引力 E. 以上所有内容。

3. Which of the following not part of the design pyramid for WebE design?

- A. Architectural design B. Business case design  
C. Content design D. Navigation design

3. 以下哪项不属于 WebE 设计的设计金字塔?

- A. 建筑设计 B. 商业案例设计 C. 内容设计 D. 导航设计

4. With WebApps content is everything, a poorly defined user interface will be quickly overlooked by frequent users.

- A. True

- B. False

4. 使用 WebApps 内容就是一切, 频繁用户很快就会忽略定义不明确的用户界面。

5. Which of these are WebApp interaction mechanisms?

- A. Graphic icons B. Graphic images  
C. Navigation menus D. All of the above

5. 其中哪些是 WebApp 交互机制?

- A. 图形图标 B. 图形图像 C. 导航菜单 D. 以上所有

6. Screen layout design has several widely accepted standards based on human factors research. 屏幕布局设计有几个基于人为因素研究的广泛接受的标准

- A. True B. False

7. Graphic design considers every aspect of the look and feel of a WebApp. 图形设计考虑了 WebApp 外观的各个方面 A. True B. False

8. Content design is conducted by 内容设计由\_\_\_\_\_进行

- A. Copywriters and graphic designer

- B. Web engineers

- C. both a and b D. none of the above

- A. 撰稿人和平面设计师 B. 网络工程师 C. a 和 b D. 以上都不是

9. Content objects have both information attributes defined during analysis and implementation specific attributes specified during design. 内容对象具有在分析期间定义的信息属性和在设计期间指定的特定属性

- A. True B. False

10. Content objects are not normally chunked into Web pages until the implementation activities begin. 在实现活动开始之前, 内容对象通常不会嵌入到 Web 页面中

- A. True B. False

11. Content architecture and WebApp architecture are pretty much the same thing for many WebApps? 对于许多 WebApp 来说, 内容架构和 WebApp 架构几乎是一回事吗

- A. True B. False

12. Which of the following is not one of the content architectural structures used by web engineers?

- A. linear B. grid C. hierarchical D. parallel

12. 以下哪项不是 Web 工程师使用的内容架构结构之一?

- A. 线性 B. 网格 C. 等级 D. 平行

13. MVC is a three layer architecture that contains a

- A. machine, view, content objects
- B. model, view, and content objects
- C. model, view, and controller
- D. machine, view, controller

13. MVC 是一个包含 a 的三层架构

- A. 机器, 视图, 内容对象
- B. 模型, 视图和内容对象
- C. 模型, 视图和控制器
- D. 机器, 视图, 控制器

14. Web navigational design involves creating a semantic navigational unit for each goal associated with each defined user role.

- A. True
- B. False

14. Web 导航设计涉及为与每个定义的用户角色相关联的每个目标创建语义导航单元。

15. To allow the user to feel in control of a WebApp, it is a good idea to mix both horizontal and vertical navigation mechanisms on the same page.

- A. True
- B. False

15. 为了让用户能够控制 WebApp, 最好在同一页面上混合水平和垂直导航机制。

16. Component level design for WebApps is very similar to component level design for other software delivery environments.

- A. True
- B. False

16. WebApps 的组件级设计与其他软件交付环境的组件级设计非常相似。

17. Which of these is not one of the design activities associated with object-oriented hypermedia design?

- A. abstract interface design
- B. conceptual design
- C. content design
- D. navigational design

17. 哪些不是与面向对象的超媒体设计相关的设计活动之一?

- A. 抽象界面设计
- B. 概念设计
- C. 内容设计
- D. 导航设计

18. UML does not have any representation schemas that are useful in building WebApp design models.

- A. True
- B. False

18. UML 没有任何在构建 WebApp 设计模型时有用的表示模式。

## 第 18 章

1. MobileApps must be designed take intermittent connectivity outages. 必须将 MobileApps 设计为间歇性连接中断 A. True B. False

2. Modern electronics allow developers to ignore the power demands made by a MobileApp. 现代电子产品允许开发人员忽略 MobileApp 的功率需求  
A. True B. False

3. A MobileApp is assessed for usability and accessibility before beginning the next increment begins. 在开始下一个增量开始之前, 评估 MobileApp 的可用性和可访问性  
A. True  
B. False

4. Which of the following characteristics should not be used to assess the quality of a MobileApp?  
A. aesthetics B. reliability  
C. maintainability D. usability

4.不应使用以下哪些特性来评估 MobileApp 的质量?  
A.美学 B.可靠性 C.可维护性 D.可用性

5. Quality function deployment is not necessary when implementing MobileApp user stories? 实施 MobileApp 用户故事时, 不需要进行质量功能部署吗  
A. True  
B. False

6. Using highly adaptive contextual interfaces is a good way to deal with device limitations like screen size.  
A. True  
B. False

6.使用高度自适应的上下文接口是处理屏幕大小等设备限制的好方法。

7. Which of the following are common MobileApp design mistakes.  
A. Inconsistency  
B. Interoperability  
C. Lean design  
D. Overdesigning  
E. a and d

7.以下哪些是常见的 MobileApp 设计错误。  
A.不一致 B.互操作性 C.精益设计 D.过度设计 E. a 和 d

8. It is better to multiple short pages than long scrolling forms when implementing mobile device user interfaces. 在实现移动设备用户界面时, 最好是多个短页而不是长滚动表  
A. True B. False

9. Java is the best programming language to use when you want to create portable MobileApps. 当您想要创建可移植的 MobileApps 时, Java 是最好的编程语言  
A. True B. False

10. Service computing allows you to avoid the need to integrate service source code into the mobile device client.

A. True  
B. False

10.服务计算允许您避免将服务源代码集成到移动设备客户端中。

11. The most important MobileApp architecture decision whether to build a thin or fat mobile client.  
A. True  
B. False

11.最重要的 MobileApp 架构决定是构建瘦客户端还是胖客户端。

## 第 19 章

1. Quality of conformance focuses on the degree to which the implementation of a design meets its requirements and performance goals.

A. True

B. False

1.一致性质量侧重于设计实施满足其要求和性能目标的程度。

2. Which of the following is not one of the attributes of software quality?

A. Adds value for developers and users

B. Effective software process creates infrastructure

C. Removes need to consider performance issues

D. Useful products satisfy stakeholder requirements

2.以下哪项不是软件质量的属性之一？

A.为开发人员和用户增加价值

B.有效的软件过程创建基础设施

C.删除需要考虑性能问题

D.有用的产品满足利益相关者的要求

3. Product quality can only be assessed by measuring hard quality factors.产品质量只能通过测量硬质量因素来评估

A. True

B. False

4. Many software metrics can only be measured indirectly. 许多软件指标只能间接测量

A. True

B. False

5. Which of the following are ISO 9126 software quality factors?

A. Functionality B. Portability C. Reliability

D. Visual appeal E. a, b, c

5.以下哪项是 ISO 9126 软件质量因素？

A.功能 B.便携性 C.可靠性 D.视觉吸引力 E. a, b, c

6. Developers need to create a collection of targeted questions to assess each quality factor.

A. True

B. False

6.开发人员需要创建一系列有针对性的问题，以评估每个品质因素。

7. Software metrics represent direct measures of some manifestation of quality.

A. True

B. False

7.软件度量表示某些质量表现的直接度量。

8. The quality dilemma might be summarized as choosing between building things quickly or building things correctly.

A. True

B. False

8.质量困境可以概括为在快速构建事物或正确构建事物之间进行选择。

9. Good enough software delivers high quality software functions along with specialized functions that contain known bugs.

A. True

B. False

9.足够好的软件提供高质量的软件功能以及包含已知错误的专用功能。

10. Which of the following is likely to be the most expensive cost of quality?

A. Appraisal costs B. External failure costs

C. Internal failure costs D. Prevention costs

10.以下哪项可能是最昂贵的质量成本？

A.评估费用 B.外部失败成本 C.内部失败成本 D.预防费用

11. Poor quality leads to software risks that can become serious?

A. True

B. False

11.质量差会导致软件风险变得严重吗？

12. When a system fails to deliver required functions it is because the customer changes requirements?

A. True

B. False

12.当系统无法提供所需功能时，是因为客户更改了要求？

13. Developers must start focusing on quality during the design phase in order to build secure systems.

A. True

B. False

13.开发人员必须在设计阶段开始关注质量，以建立安全的系统。

14. Which of the following management decisions have the potential to impact software quality?

A. Estimation decisions

B. Risk-oriented decisions

C. Scheduling decisions

D. All of the above

14.以下哪些管理决策有可能影响软件质量？

A.估算决定

B.风险导向的决策

C.调度决策

D.以上所有

15. The project plan should include explicit techniques for \_\_\_\_\_ and \_\_\_\_\_ management?

A. change

B. cost

C. error

D. quality

E. a and d

15.项目计划应包括\_\_\_\_\_和\_\_\_\_\_管理的明确技巧？  
变化

B.成本

C.错误

D.质量

E. a 和 d

16. Quality control encompasses a set of software engineering actions that help to ensure that each work product meets its quality goals.

A. True

B. False

16.质量控制包括一系列软件工程操作，有助于确保每个工作产品满足其质量目标。

17. The goal of quality assurance to insure that a software project is error free.

A. True

B. False

17.质量保证的目标是确保软件项目没有错误。

## 第 20 章

1. The purpose of software reviews is to uncover errors and defects in work products so they can be removed before moving on to the next phase of development. 软件审查目的是发现工作产品中的错误和缺陷, 以便在进入下一个开发阶段前将其删除 A. True B. False

2. In general the earlier a software defect is discovered and corrected the less costly to the overall project budget. 一般而言, 发现并纠正软件缺陷越早, 整体项目预算的成本就越低 A. True B. False

3. Defect amplification models can be used to illustrate the costs associated with using software from its initial deployment to its retirement. 缺陷放大模型可用于说明从初始部署到退役时使用软件的相关成本 A. True B. False

4. Review metrics can be used to assess the efficacy of each review activity. 审核指标可用于评估每项审核活动效果 A. True B. False

5. Defect density can be estimated for any software engineering work product. 可以估算任何软件工程工作产品的缺陷密度 A. True B. False

6. Agile software developers are aware that software reviews always take time without saving any. 敏捷软件开发人员意识到软件评论总是需要时间而不需要保存 A. True B. False

7. The level of review formality is determined by which of the following? 审查程序的等级取决于以下哪一项

A. amount of preparation B. reviewer follow-up  
C. size of project budget D. structure of review E. a, b, d  
A. 准备量 B. 审查员的后续行动 C. 项目预算的规模 D. 审查结构 E. a, b, d

8. An informal review may consist of which of the following? 非正式审查可能包括以下哪项 A. 临时会议 B. 桌面检查 C. 检查 D. 结对编程 E. a 和 b  
A. casual meeting B. desk check C. inspection  
D. pair programming E. a and b

9. Which of the following are objectives for formal technical reviews? 以下哪项是正式技术审查的目标

A. allow senior staff members to correct errors  
B. assess programmer productivity  
C. determining who introduced an error into a program  
D. uncover errors in software work products

A. 允许高级工作人员纠正错误 B. 评估程序员的生产力  
C. 确定谁将错误引入程序 D. 发现软件工作产品中的错误

10. At the end of a formal technical review all attendees can decide to 在正式技术审查结束时, 所有与会者都可以决定

A. accept the work product without modification  
B. modify the work product and continue the review  
C. reject the product due to stylistic discrepancies  
D. reject the product due to severe errors  
E. a and d

A. 接受工作产品, 无需修改 B. 修改工作产品并继续审核  
C. 由于风格上的差异而拒绝产品 D. 由于严重错误拒绝产品 E. a 和 d

11. A review summary report answers which three questions? 审查摘要报告回答了哪三个问题

A. terminate project, replace producer, request a time extension  
终止项目, 替换生产者, 请求延长时间  
B. what defects were found, what caused defects, who was responsible 发现了哪些缺陷, 什么导致缺陷, 谁负责  
C. what was reviewed, who reviewed it, what were the findings

审查了什么, 审查了什么, 结果是什么  
D. none of the above

12. In any type of technical review, the focus of the review is on the product and not the producer. 在任何类型的技术审查中, 审查的重点是产品而不是生产者  
A. True B. False

13. Sample driven reviews only make sense for very small software development projects. 13. 样本驱动的评论仅适用于非常小的软件开发项目。 A. True B. False



## 第 21 章

1. Software quality might be defined as conformance to explicitly stated requirements and standards, nothing more and nothing less.

A. True

B. False

1.软件质量可能被定义为符合明确规定的要求和标准，仅此而已。

2. People who perform software quality assurance must look at the software from the customer's perspective.

A. True

B. False

2.执行软件质量保证的人员必须从客户的角度来看待软件。

3. The elements of software quality assurance consist of reviews, audits, and testing.

A. True

B. False

3.软件质量保证的要素包括审查，审计和测试。

4. Which of these activities is not one of the activities recommended to be performed by an independent SQA group?

A. prepare SQA plan for the project

B. review software engineering activities to verify process compliance

C. report any evidence of noncompliance to senior management

D. serve as the sole test team for any software produced

4.哪些活动不是独立 SQA 小组推荐的活动之一？

A.为项目准备 SQA 计划

B.审查软件工程活动以验证流程合规性

C.向高级管理层报告任何不合规的证据

D.作为所有软件的唯一测试团队

5. Metrics can be used to indicate the relative strength of a software quality attribute.

A. True

B. False

5.度量标准可用于指示软件质量属性的相对强度。

6. Attempts to apply mathematical proof to demonstrate that a program conforms to its specifications are doomed to failure.

A. True

B. False

6.尝试应用数学证明来证明程序符合其规范注定要失败。

7. Statistical quality assurance involves

A. using sampling in place of exhaustive testing of software

B. surveying customers to find out their opinions about product quality

C. tracing each defect to its underlying cause, isolating the "vital few" causes, and moving to correct them

D. tracing each defect to its underlying causes and using the Pareto principle to correct each problem found

7.统计质量保证涉及

A.使用抽样代替软件的详尽测试

B.调查客户，了解他们对产品质量的看法

C.追踪每个缺陷的根本原因，隔离“至关重要的”原因，并采取措施纠正它们

D.将每个缺陷追溯到其根本原因，并使用帕累托原则来纠正发现的每个问题

8. Six Sigma methodology defines three core steps.

- A. analyze, improve, control
- B. analyze, design, verify
- C. define, measure, analyze
- D. define, measure, control

8.六西格玛方法定义了三个核心步骤。

- A.分析, 改进, 控制
- B.分析, 设计, 验证
- C.定义, 测量, 分析
- D.定义, 测量, 控制

9. Software reliability problems can almost always be traced to

- A. errors in accuracy
- B. errors in design
- C. errors in implementation
- D. errors in operation

E. b and c

9.软件可靠性问题几乎总是可以追溯到

- A.准确性的错误
- B.设计错误
- C.执行中的错误
- D.操作错误
- E. b 和 c

10. Software safety is a quality assurance activity that focuses on hazards that

- A. affect the reliability of a software component
- B. may cause an entire system to fail
- C. may result from user input errors
- D. prevent profitable marketing of the final product

10.软件安全是一项质量保证活动, 专注于危害

- A.影响软件组件的可靠性
- B.可能导致整个系统失败
- C.可能是由用户输入错误引起的
- D.防止最终产品的有利营销

11. The ISO quality assurance standard that applies to software engineering is

- A. ISO 9000
- B. ISO 9001
- C. ISO 9002
- D. ISO 9003

11.适用于软件工程的 ISO 质量保证标准是

- A. ISO 9000
- B. ISO 9001
- C. ISO 9002
- D. ISO 9003

12. Which of the following is not a section in the standard for SQA plans recommended by IEEE?

- A. budget
- B. documentation
- C. reviews and audits
- D. test

12.以下哪项不是 IEEE 推荐的 SQA 计划标准中的一部分?

- A.预算
- B.文件
- C.审查和审计
- D.测试

## 第 22 章

1. In software quality assurance work there is no difference between software verification and software validation.

- A. True      B. False

1.在软件质量保证工作中，软件验证和软件验证之间没有区别。

2. The best reason for using Independent software test teams is that

- A. software developers do not need to do any testing  
B. strangers will test the software mercilessly  
C. testers do not get involved with the project until testing begins

D. the conflicts of interest between developers and testers is reduced

2.使用独立软件测试团队的最佳理由是

- A.软件开发人员不需要进行任何测试  
B.陌生人将毫不留情地测试软件  
C.测试人员在测试开始前不参与该项目  
D.减少了开发人员和测试人员之间的利益冲突

3. What is the normal order of activities in which traditional software testing is organized?

- A. integration testing, system testing, unit testing, validation testing.  
B. unit testing, validation testing, system testing, integration testing

C. unit testing, integration testing, validation testing, system testing

D. validation testing, system testing, integration testing, unit testing

3.组织传统软件测试的正常活动顺序是什么？

- A.集成测试，系统测试，单元测试，验证测试。  
B.单元测试，验证测试，系统测试，集成测试  
C.单元测试，集成测试，验证测试，系统测试  
D.验证测试，系统测试，集成测试，单元测试

4. By collecting software metrics and making use of existing software reliability models it is possible to develop meaningful guidelines for determining when software testing is done.

A. True

B. False

4.通过收集软件指标并利用现有的软件可靠性模型，可以制定有意义的指导方针，以确定何时完成软件测试。

5. Which of the following strategic issues needs to be addressed in a successful software testing process?

- A. conduct formal technical reviews prior to testing  
B. specify requirements in a quantifiable manner  
C. use independent test teams  
D. wait till code is written prior to writing the test plan

E. a and b

5.在成功的软件测试过程中，需要解决以下哪些战略问题？

- A.在测试之前进行正式的技术评审  
B.以可量化的方式指定要求  
C.使用独立的测试团队  
D.等到编写测试计划之前编写代码  
E. a 和 b

6. Which of the following need to be assessed during unit testing?

- A. algorithmic performance  
B. code stability  
C. error handling  
D. execution paths

E. c and d

6.在单元测试期间需要评估以下哪项？

- A.算法性能 B.代码稳定性 C.错误处理  
D.执行路径 E. c 和 d

7. Units and stubs are not needed for unit testing because the modules are tested independently of one another.

A. True

B. False

7.单元测试不需要单元和存根，因为模块是相互独立测试的。

8. Top-down integration testing has as its major advantage(s) that

A. low level modules never need testing

B. major decision points are tested early

C. no drivers need to be written

D. no stubs need to be written

E. b and c

8.自上而下的集成测试具有以下主要优点

A.低级模块永远不需要测试

B.主要决策点早期测试

C.不需要写任何司机

D.不需要写任何存根

E. b 和 c

9. Bottom-up integration testing has as its major advantage(s) that

A. major decision points are tested early

B. no drivers need to be written

C. no stubs need to be written

D. regression testing is not required

9.自下而上的集成测试具有以下主要优点

A.主要决策点尽早测试

B.没有司机需要写

C.不需要写任何存根

D.不需要回归测试

10. Regression testing should be a normal part of integration testing because as a new module is added to the system new

A. control logic is invoked

B. data flow paths are established

C. drivers require testing

D. all of the above

E. a and b

10.回归测试应该是集成测试的正常部分，因为新的模块被添加到系统中

A.调用控制逻辑

B.建立数据流路径

C.司机需要测试

D.以上所有内容

E. a 和 b

11. Smoke testing might best be described as

A. bulletproofing shrink-wrapped software

B. rolling integration testing

C. testing that hides implementation errors

D. unit testing for small programs

11.烟雾测试最好被描述为

A.防弹收缩包装软件

B.滚动集成测试

C.测试隐藏实现错误

D.小型程序的单元测试

12. When testing object-oriented software it is important to test each class operation separately as part of the unit testing process.

A. True

B. False

12.在测试面向对象的软件时，重要的是分别测试每个类操作作为单元测试过程的一部分。

13. The OO testing integration strategy involves testing

A. groups of classes that collaborate or communicate in some way

B. single operations as they are added to the evolving class implementation

C. operator programs derived from use-case scenarios

D. none of the above

13. OO 测试集成策略涉及测试

A.以某种方式协作或通信的类组

B.单个操作，因为它们被添加到不断发展的类实现中

C.来自用例场景的运算符程序

D.以上都不是

14. Since many WebApps evolve continuously, the testing process must be ongoing as well.

A. True

B. False

14.由于许多 WebApps 不断发展，测试过程也必须持续进行。

15. Testing MobileApps is not different than testing WebApps.

A. True

B. False

15.测试 MobileApps 与测试 WebApps 没什么不同。

16. The focus of validation testing is to uncover places that s user will be able to observe failure of the software to conform to its requirements.

A. True

B. False

16.验证测试的重点是发现用户能够观察到软件故障符合其要求的位置。

17. Software validation is achieved through a series of tests performed by the user once the software is deployed in his or her work environment.

A. True

B. False

17.软件验证是通过用户在其工作环境中部署软件后执行的一系列测试来实现的。

18. Configuration reviews are not needed if regression testing has been rigorously applied during software integration.

A. True

B. False

18.如果在软件集成期间严格应用回归测试，则不需要进行配置评审。

19. Acceptance tests are normally conducted by the

A. developer

B. end users

C. test team

D. systems engineers

19.验收测试通常由

A.开发人员

B.最终用户

C.测试团队

D.系统工程师

20. Recovery testing is a system test that forces the software to fail in a variety of ways and verifies that software is able to continue execution without interruption.

A. True

B. False

20.恢复测试是一种系统测试，它以各种方式强制软件失败，并验证软件是否能够不间断地继续执行。

21. Security testing attempts to verify that protection mechanisms built into a system protect it from improper penetration.

A. True

B. False

21.安全测试试图验证系统内置的保护机制可以保护其免受不当渗透。

22. Stress testing examines the pressures placed on the user during system use in extreme environments.

A. True

B. False

22.压力测试检查在极端环境中系统使用期间对用户施加的压力。

23. Performance testing is only important for real-time or embedded systems.

A. True

B. False

23.性能测试仅对实时或嵌入式系统很重要。

24. Debugging is not testing, but always occurs as a consequence of testing.

A. True

B. False

24.调试不是测试，但总是在测试的结果下发生。

25. Which of the following is an approach to debugging?

A. backtracking

B. brute force

C. cause elimination

D. code restructuring

E. a, b, c

25.以下哪项是调试方法？

A.回溯

B.蛮力

C.导致消除

D.代码重组

E. a, b, c

## 第 23 章

1. With thorough testing it is possible to remove all defects from a program prior to delivery to the customer. 通过全面测试, 可以在交付给客户之前从程序中删除所有缺陷。 A. True B. False

2. Which of the following are characteristics of testable software?

- A. observability B. simplicity  
C. stability D. all of the above

2. 以下哪些是可测试软件的特征?

- A. 可观察性 B. 简单 C. 稳定性 D. 以上所有内容

3. The testing technique that requires devising test cases to demonstrate that each program function is operational is called

- A. black-box testing  
B. glass-box testing  
C. grey-box testing  
D. white-box testing

3. 需要设计测试用例以证明每个程序功能都可操作的测试技术

- A. 黑盒测试 B. 玻璃盒测试 C. 灰盒测试 D. 白盒测试

4. The testing technique that requires devising test cases to exercise the internal logic of a software module is called

- A. behavioral testing  
B. black-box testing  
C. grey-box testing  
D. white-box testing

4. 需要设计测试用例以执行软件模块内部逻辑的测试技术

- A. 行为测试  
B. 黑盒测试  
C. 灰盒测试  
D. 白盒测试

5. What types of errors are missed by black-box testing and can be uncovered by white-box testing? 黑盒测试错过了哪些类型的错误, 可以通过白盒测试发现

- A. behavioral errors B. logic errors C. performance errors D. typographical errors E. b and d  
A. 行为错误 B. 逻辑错误 C. 表现错误 D. 印刷错误 E. b 和 d

6. Program flow graphs are identical to program flowcharts. 程序流程图与程序流程图相同 A. True B. False

7. The cyclomatic complexity metric provides the designer with information regarding the number of

- A. cycles in the program B. errors in the program  
C. independent logic paths in the program  
D. statements in the program

7. 圈复杂度度量为设计者提供有关数量的信息

- A. 程序中的循环 B. 计划中的错误  
C. 程序中的独立逻辑路径 D. 计划中的陈述

8. The cyclomatic complexity of a program can be computed directly from a PDL representation of an algorithm without drawing a program flow graph. 程序的圈复杂度可以直接从算法的 PDL 表示计算而无需绘制程序流程图 A. True B. False

9. Condition testing is a control structure testing technique where the criteria used to design test cases is that they 条件测试是一种控制结构测试技术, 其中用于设计测试用例的标准是它们 A. rely on basis path testing

- B. exercise the logical conditions in a program module  
C. select test paths based on the locations and uses of variables  
D. focus on testing the validity of loop constructs

- A. 依靠基础路径测试 B. 在程序模块中练习逻辑条件  
C. 根据变量的位置和用途选择测试路径  
D. 专注于测试循环结构的有效性

10. Data flow testing is a control structure testing

technique where the criteria used to design test cases is that they 数据流测试是一种控制结构测试技术, 其中用于设计测试用例的标准就是它们

A. rely on basis path testing

B. exercise the logical conditions in a program module

C. select test paths based on the locations and uses of variables

D. focus on testing the validity of loop constructs

A. 依靠基础路径测试 B. 在程序模块中练习逻辑条件

C. 根据变量的位置和用途选择测试路径

D. 专注于测试循环结构的有效性

11. Loop testing is a control structure testing technique where the criteria used to design test cases is that they 循环测试是一种控制结构测试技术, 其中用于设计测试用例的标准就是它们 A. rely basis path testing

B. exercise the logical conditions in a program module

C. select test paths based on the locations and uses of variables

D. focus on testing the validity of loop constructs

11.

A. 依靠路径测试 B. 在程序模块中练习逻辑条件

C. 根据变量的位置和用途选择测试路径

D. 专注于测试循环结构的有效性

12. Black-box testing attempts to find errors in which of the following categories 黑盒测试试图找出以下什么错误

A. incorrect or missing functions B. interface errors

C. performance errors D. none of the above E. a, b, c

A. 功能不正确或缺失 B. 界面错误 C. 表现错误 D. 以上都不是 E. a, b, c

13. Graph-based testing methods can only be used for object-oriented systems 基于图形的测试方法只能用于面向对象的对象系统 A. True B. False

14. Equivalence testing divides the input domain into classes of data from which test cases can be derived to reduce the total number of test cases that must be developed. 等效性测试将输入域划分为可以从中派生测试用例的数据类, 以减少必须开发的测试用例的总数 A. True B. False

15. Boundary value analysis can only be used to do white-box testing. 边界值分析只能用于进行白盒测试

A. True B. False

16. Orthogonal array testing enables the test designer to maximize the coverage of the test cases devised for relatively small input domains. 正交阵列测试使测试设计人员能够最大化对相对较小的输入域设计的测试用例的覆盖范围 A. True B. False

17. Test derived from behavioral class models should be based on the 来自行为类模型的测试应该基于

A. data flow diagram B. object-relation diagram

C. state transition diagram D. use-case diagram

A. 数据流程图 B. 对象关系图 C. 状态转换图 D. 用例图

18. Documentation does not need to be tested.

A. True B. False

18. 文件不需要进行测试。

19. Real-time applications add a new and potentially difficult element to the testing mix

A. performance B. reliability C. security D. time

19. 实时应用程序为测试组合添加了一个新的且可能很难的元素

A. 性能

B. 可靠性

C. 安全

D. 时间



## 第 24 章

1. It is not possible to test object-oriented software without including error discovery techniques applied to the system OOA and OOD models.

A. True

B. False

1. 如果不包括应用于系统 OOA 和 OOD 模型的错误发现技术，则无法测试面向对象的软件。

2. The correctness of the OOA and OOD model is accomplished using formal technical reviews by the software quality assurance team.

A. True

B. False

2. OOA 和 OOD 模型的正确性是通过软件质量保证团队的正式技术评审来完成的。

3. The consistency of object-oriented models may be judged by reviewing the CRC card model.

A. True

B. False

3. 可以通过查看 CRC 卡模型来判断面向对象模型的一致性。

4. Test case design for OO software is driven by the algorithmic detail of the individual operations.

A. True

B. False

4. 面向对象软件的测试用例设计由各个操作的算法细节驱动。

5. Integration testing of object-oriented software can be accomplished by which of the following testing strategies?

A. Cluster testing

B. Glass-box testing

C. Thread-based testing

D. Use-based testing

E. a, c, d

5. 面向对象软件的集成测试可以通过以下哪种测试策略来完成？

A. 集群测试

B. 玻璃盒测试

C. 基于线程的测试

D. 基于使用的测试

E. a, c, d

6. Validation of object-oriented software focuses on user visible actions and outputs from the system.

A. True

B. False

6. 面向对象软件的验证侧重于用户可见的操作和系统输出。

7. Encapsulation of attributes and operations inside objects makes it easy to obtain object state information during testing.

A. True

B. False

7. 对象内部的属性和操作的封装使得在测试期间容易获得对象状态信息。

8. Use-cases can provide useful input into the design of black-box and state-based tests of OO software.

A. True

B. False

8.用例可以为 OO 软件的黑盒和基于状态的测试设计提供有用的输入。

9. Fault-based testing is best reserved for

A. conventional software testing

B. operations and classes that are critical or suspect

C. use-case validation

D. white-box testing of operator algorithms

9.最好保留基于故障的测试

A.常规软件测试

B.重要或可疑的操作和类别

C.用例验证

D.运算符算法的白盒测试

10. Scenario-based testing

A. concentrates on actor and software interaction

B. misses errors in specifications

C. misses errors in subsystem interactions

D. both a and b

10.基于场景的测试

A.专注于演员和软件的互动

B.错过了规格中的错误

C.错过了子系统交互中的错误

D. a 和 b

11. Random order tests are conducted to exercise different class instance life histories.

A. True

B. False

11.进行随机顺序测试以运用不同的类实例生活历史。

12. Which of these techniques is not useful for partition

testing at the class level

A. attribute-based partitioning

B. category-based partitioning

C. equivalence class partitioning

D. state-based partitioning

12.这些技术中的哪一种对于类级别的分区测试没有用

A.基于属性的分区

B.基于类别的分区

C.等价类划分

D.基于状态的分区

13. Multiple class testing is too complex to be tested using random test cases.

A. True

B. False

13.多类测试过于复杂，无法使用随机测试用例进行测试。

14. The state model can be used to derive test cases based on the dynamic behavior of an object-oriented system.

A. True

B. False

14.状态模型可用于基于面向对象系统的动态行为导出测试用例。

## 第 25 章

1. Which of the following is not one of the dimensions of quality used to assess a WebApp? 以下哪项不是用于评估 WebApp 的质量维度之一 A. Content B. Maintainability

C. Navigability D. Usability

A.内容 B.可维护性 C.导航性 D.可用性

2. WebApps require special testing methodologies because WebApp errors have several unique characteristics. WebApps 需要特殊的测试方法, 因为 WebApp 错误具有几个独特的特征 A. True B. False

3. Since WebnApps evolve continuously, the testing process is an on-going activity, conducted by the Web support staff using regression tests. 由于 WebnApps 不断发展, 测试过程是一项持续的活动, 由 Web 支持人员使用回归测试进行 A. True B. False

4. Test planning is not used in WebApp testing. WebApp 测试中未使用测试计划 A. True B. False

5. As the WebApp architecture is constructed which types of testing are used as integration tests?

A. Component testing B. Content testing  
C. Navigation testing D. Usability testing E. a and c

5.构建 WebApp 体系结构时, 哪种类型的测试用作集成测试?

A.组件测试 B.内容测试 C.导航测试 D.可用性测试 E. a 和 c

6. Which of the following is not one of the objectives of WebApp content testing? 以下哪项不是 WebApp 内容测试的目标之一

A. Find organizational or structure errors  
B. Identify linking errors C. Uncover semantic errors

D. Uncover syntactic errors

A.查找组织或结构错误 B.识别链接错误

C.发现语义错误 D.发现语法错误

7. Database testing is very rarely a part of WebApp content testing. 数据库测试很少是 WebApp 内容测试的一部分 A. True B. False

8. The overall strategy for interface testing is to uncover errors 界面测试的总体策略是发现错误

A. in navigation semantics  
B. in overall usability  
C. related to specific interface mechanisms  
D. both a and c

A.在导航语义学中 B.总体可用性

C.与特定接口机制有关 D. a 和 c

9. Which of the following is not a WebApp interface mechanism?

A. Browser B. Cookies C. Forms D. Links

9.以下哪项不是 WebApp 接口机制?

A.浏览器 B.饼干 C.表格 D.链接

10. When testing WebApp interface semantics, each use-case is used as input for the design of a testing sequence. 在测试 WebApp 接口语义时, 每个用例都用作设计测试序列的输入 A. True B. False

11. Usability tests should be designed and executed by intended users for a given WebApp. 可用性测试应由给定 WebApp 的预期用户设计和执行 A. True B. False

12. WebApp compatibility testing is conducted to be sure that the user model for usage scenario matched the user category assigned to a given user.

A. True

B. False

12.进行 WebApp 兼容性测试以确保使用场景的用户模型与分配给给定用户的用户类别相匹配。

13. Which test case design technique(s) are appropriate for WebApp component-level testing?

- A. Boundary value analysis
- B. Equivalence partitioning
- C. Path testing
- D. All of the above

13.哪种测试用例设计技术适用于 WebApp 组件级测试？

- A.边界值分析 B.等价划分 C.路径测试 D.以上所有

14. The purpose of WebApp navigation syntactic testing is to ensure the correct appearance of each navigation mechanism. WebApp 导航语法测试的目的是确保每个导航机制的正确外观 A. True B. False

15. Both Web engineers and non-technical users conduct navigation semantics testing for WebApps. Web 工程师和非技术用户都为 WebApps 进行导航语义测试 A. True B. False

16. Which of following is not one of the elements that need to be considered when constructing WebApp server-side configuration tests? A. Browser compatibility

- B. Database software integration
- C. Operating system compatibility
- D. System security measures

16.在构建 WebApp 服务器端配置测试时，以下哪一项不是需要考虑的元素之一？

- A.浏览器兼容性 B.数据库软件集成
- C.操作系统兼容性 D.系统安全措施

17. To design client-side configuration tests each user category is assessed to reduce the number of configuration variables to a manageable number. 为了设计客户端配置测试，评估每个用户类别以将配置变量的数量减少到可管理的数量 A. True B. False

18. Which of the following is not a testable WebApp security element?

- A. Authentication B. Encryption
- C. Firewalls D. Penetration

18.以下哪项不是可测试的 WebApp 安全元素？

- A.认证 B.加密 C.防火墙 D.渗透

19. WebApp performance tests are designed to C. simulate real-world loading situations

- D. test network connectivity

19. WebApp 性能测试旨在实现

- A.评估 WebApp 的可用性
- B.评估页面加载时间
- C.模拟现实世界的装载情况
- D.测试网络连接

20. Load testing involves determining the input of which 3 variables? A. N, T, D

- B. N, T, P
- C. T, D, P
- D. N, D, P

20.负载测试涉及确定输入哪三个变量？

- A. N, T, D
- B. N, T, P
- C. T, D, P
- D. N, D, P

21. WebApp stress testing is a continuation load testing. A. True

- B. False

21. WebApp 压力测试是一种持续的负载测试。

## 第 26 章

1. MobileApps require special testing methodologies because of concerns associated using them in diverse network environments.

A. True

B. False

1.由于担心在不同的网络环境中使用它们， MobileApps 需要特殊的测试方法。

2. Since MobileApp users are attracted to new technologies they are very tolerant of errors and testing effort can be reduced.

A. True

B. False

2.由于 MobileApp 用户被新技术所吸引，因此他们非常容忍错误，并且可以减少测试工作量。

3. Designing test cases directly from user stories increase the likelihood of developing effective test cases in a timely manner.

A. True

B. False

3.直接从用户故事设计测试用例可以提高及时开发有效测试用例的可能性。

4. Automated testing tools eliminate the need to do regression testing for MobileApps.

A. True

B. False

4.自动化测试工具消除了对 MobileApps 进行回归测试的需要。

5. A weighted device platform matrix helps to prioritize test cases.

A. True

B. False

5.加权设备平台矩阵有助于确定测试用例的优先级。

6. Part of the reason for stress testing is to ensure that the MobileApp exhibits graceful degradation on failure.

A. True

B. False

6.压力测试的部分原因是确保 MobileApp 在故障时表现出优雅的降级。

7. Which of the following are reasons for testing in the wild?

A. Assessing the impact of production environments

B. Failing to create test cases

C. Not understanding user demographics

D. Testing for variable performance on user devices

E. both a and d

7.下列哪一项是在野外进行测试的原因？

A.评估生产环境的影响

B.未能创建测试用例

C.不了解用户人口统计数据

D.测试用户设备上的可变性能

E. a 和 d

8. When testing the quality of user interaction the focus should be on user visible interaction mechanisms.

A. True

B. False

8.在测试用户交互的质量时，重点应放在用户可见的交互机制上。

9. Which of the following add to the difficulty of testing MobileApp gestures?

- A. Automatic tool use is difficult
- B. Creating functions to simulate events
- C. Screen size variation
- D. Using paper prototypes

E. a, b, c

9.以下哪项增加了测试 MobileApp 手势的难度？

- A.自动使用工具很困难
- B.创建模拟事件的函数
- C.屏幕尺寸变化
- D.使用纸质原型
- E. a, b, c

10. Continuous speech recognition techniques have eliminated the need for key entry in MobileApps.

A. True

B. False

10.连续语音识别技术消除了对 MobileApps 中密钥输入的需求。

11. Predictive technologies are often used to help speed up virtual keyboard input on mobile devices.

A. True

B. False

11.预测技术通常用于帮助加速移动设备上的虚拟键盘输入。

12. The ability of a MobileApp to handle alerts without disrupting user workflow must be tested in the production environment?

A. True

B. False

12.必须在生产环境中测试 MobileApp 在不中断用户工作流程的情况下处理警报的能力吗？

13. The Testing across borders is not necessary each MobileApp is developed for use in a specific country.

A. True

B. False

13.每个 MobileApp 都是为在特定国家/地区使用而开发的，因此无需跨边界测试。

14. Which of the following are issues that make real-time testing difficult?

- A. Limited device processing capacity
- B. Power limitations on the device
- C. Unique mobile network infrastructures
- D. All of the above

14.以下哪些问题使实时测试变得困难？

- A.有限的设备处理能力
- B.设备的功率限制
- C.独特的移动网络基础设施
- D.以上所有

15. Device emulators eliminate the need to test MobileApps on actual devices.

A. True

B. False

15.设备模拟器无需在实际设备上测试 MobileApps。

## 第 27 章

1. When analyzing security requirements focus in system assets with the highest value and greatest exposure.

A. True

B. False

1.在分析安全要求时，重点关注具有最高价值和最大风险的系统资产。

2. It is possible to have a safe system that is not secure.

A. True

B. False

2.可能有一个不安全的安全系统。

3. Individuals rarely expose their personal information to others on social media networks.

A. True

B. False

3.个人很少在社交媒体网络上向他人展示他们的个人信息。

4. Wireless networks require the trust and cooperation between nodes that can be exploited by malicious programs?

A. True

B. False

4.无线网络需要可被恶意程序利用的节点之间的信任与合作？

5. Cloud computing is has greater levels of security that other web data repositories.

A. True

B. False

5.云计算具有比其他 Web 数据存储库更高的安全级别。

6. The security concerns remain an obstacle to implementing the vision implied by the Internet of Things .

A. True

B. False

6.安全问题仍然是实施物联网隐含的愿景的障碍。

7. Security and usability requirements are often in conflict with each other.

A. True

B. False

7.安全性和可用性要求经常相互冲突。

8. Which of following is not one of the elements of a security model?

A. Criminal background checks

B. External interface requirements

C. Rules of operation

D. Security policy objectives

8.以下哪一项不是安全模型的要素之一？

A.刑事背景调查

B.外部接口要求

C.经营规则

D.安全政策目标

9. Security metrics and measures need to assess which of these properties?

A. Dependability

B. Survivability

C. Trustworthiness

D. All of the above

9.安全指标和措施需要评估哪些属性？

A.可靠性

B.生存能力

C.可信度

D.以上所有

10. Security correctness checks should be included which of the following activities?

- A. Audits
- B. Deployment
- C. Inspections
- D. Testing

E. a, b, c

10.安全性正确性检查应包括以下哪些活动？

- A. 审计
- B. 部署
- C. 检查
- D. 测试
- E. a, b, c

11. Which is not one of the elements of a security case?

- A. Arguments
- B. Bug reports
- C. Claims
- D. Evidence

11.哪个不是安全案件的要素之一？

- A. 论点
- B. Bug 报告
- C. 索赔
- D. 证据

12. Security assurance and risk identification must be included in the schedule and budget if they are to be taken seriously.

A. True

B. False

12.如果要认真对待，安全保证和风险识别必须包括在时间表和预算中。

13. Threat analysis is not needed for conventional software applications.

A. True

B. False

13.传统软件应用程序不需要进行威胁分析。

14. An incident response plan spells out the actions to be carried out by each stakeholder in response to specific attacks.

A. True

B. False

14.事件响应计划阐明了每个利益相关者为应对特定攻击而应采取的行动。



## 第 28 章

1. The cleanroom strategy is based on the \_\_\_\_\_ software process model.

- A. evolutionary   B. incremental  
C. revolutionary   D. spiral

1. 洁净室策略基于\_\_\_\_\_软件过程模型。

- A. 进化论 B. 增量 C. 革命性的 D. 螺旋

2. The cleanroom strategy relies on

- A. exhaustive testing  
B. extensive unit testing of all modules  
C. tests that exercise the software as it is really used  
D. white box testing strategies

2. 洁净室战略依赖于

- A. 详尽的测试 B. 对所有模块进行广泛的单元测试  
C. 运行软件的测试，因为它确实使用 D. 白盒测试策略

3. Use of formal program correctness proofs as part of the cleanroom process eliminates the need do any testing for software defects. 使用正式程序正确性证明作为洁净室过程的一部分，无需对软件缺陷进行任何测试

- A. True   B. False

4. In cleanroom software engineering a "box" encapsulates some system aspect at a particular level of detail. 在洁净室软件工程中，“盒子”将某些系统方面封装在特定的细节层面 A. True   B. False

5. This box specification describes an abstraction, stimuli, and response. 这个盒子规范描述了抽象，刺激和响应

- A. black box

- B. clear box  
C. state box  
D. white box

A. 黑匣子 B. 清除盒子

C. 州框 D. 白盒子

6. This box specification describes the architectural design for some system component.

- A. black box   B. clear box  
C. state box   D. white box

6. 此框规范描述了某些系统组件的体系结构设计。

A. 黑匣子 B. 清除盒子 C. 州框 D. 白盒子

7. This box specification is closely aligned with procedural design and structured programming.

- A. black box   B. clear box   C. state box   D. white box

7. 此框规范与程序设计和结构化编程紧密结合。

A. 黑匣子 B. 清除盒子 C. 州框 D. 白盒子

8. In cleanroom software engineering the structured programming approach is used to 在洁净室软件工程中，使用结构化编程方法

- A. refine data design   B. refine function design

- C. refine usage test cases   D. both a and b

A. 改进数据设计 B. 细化功能设计 C. 改进使用测试用例 D. a 和 b

9. By using only structured programming constructs as you create a procedural design, you make the work of proving design correctness much easier. 通过在创建过程设计时仅使用结构化编程构造，您可以更轻松地证明设计正确性 A. True   B. False

10. Which of the following is not an advantage of using rigorous correctness verification of each refinement of the clear box design? 对于透明盒设计的每个细化使用严格的正确性验证，以下哪项不是优势

- A. improves performance of code

- B. produces better code than unit testing  
C. reduces verification effort  
D. results in near zero defect levels

A. 提高代码的性能 B. 产生比单元测试更好的代码

C. 减少验证工作量 D. 导致接近零缺陷水平

11. Statistical use testing relies on probability distributions based on
- A. mixture of control structures used in the program
  - B. order in which the module execute
  - C. the way software will actually be used
  - D. user interface design standards

11.统计使用测试依赖于基于的概率分布

- A.程序中使用的控制结构的混合
- B.模块执行的顺序
- C.实际使用软件的方式
- D.用户界面设计标准

12. Certification of an increment is complete once it has passed the formal verification process.

- A. True
- B. False

12.通过正式验证程序后，增量证明即告完成。

13. Which of the following models is part of the cleanroom certification process?

- A. component model
- B. sampling model
- C. both a and b
- D. none of the above

13.以下哪种型号是洁净室认证过程的一部分？

- A.组件模型
- B.抽样模型
- C. a 和 b
- D.以上都不是

14. A data invariant is a set of conditions that are true during the execution of any function.

- A. True
- B. False

14.数据不变量是在执行任何函数期间为真的一组条件。

15. In some formal languages, stored data that the system accesses and alters is called a(n)

- A. attribute
- B. data structure
- C. state
- D. variant

15.在某些正式语言中，系统访问和更改的存储数据称为 a (n)

- A.属性
- B.数据结构
- C.状态
- D.变种

16. In formal methods work, an action that reads or writes data to a state is called a(n)

- A. actor
- B. event
- C. invariant
- D. operation

16.在正式方法工作中，将数据读取或写入状态的操作称为 a (n)

- A.演员
- B.事件
- C.不变量
- D.操作

17. What defines the circumstances in which a particular operation is valid?

- A. data invariant
- B. precondition
- C. postcondition
- D. state

17.什么定义了特定操作有效的情况？

- A.数据不变
- B.前提条件
- C.后置条件
- D.状态

18. Using formal methods eliminates the need to write natural language commentary in the specification document.

- A. True
- B. False

18.使用形式方法消除了在规范文档中编写自然语言注释的需要。

## 第 29 章

1. Which of these are valid software configuration items?

- A. case tools
- B. documentation
- C. executable programs
- D. test data

E. All of the above.

1. 以下哪些是有效的软件配置项？

- A. 案例工具
- B. 文件
- C. 可执行程序
- D. 测试数据
- E. 以上所有内容。

2. Which of the following is not considered one of the four important elements that should exist when a configuration management system is developed?

- A. component elements
- B. human elements
- C. process elements

D. validation elements

2. 在开发配置管理系统时，以下哪一项不被视为应该存在的四个重要元素之一？

- A. 组成要素
- B. 人的因素
- C. 过程要素
- D. 验证要素

3. Once a software engineering work product becomes a baseline it cannot be changed again.

A. True

B. False

3. 一旦软件工作产品成为基准，就无法再次更改。

4. Which configuration objects would not typically be found in the project database?

- A. design specification
- B. marketing data
- C. organizational structure description
- D. test plans

E. b and c

4. 通常在项目数据库中找不到哪些配置对象？

- A. 设计规范
- B. 营销数据
- C. 组织结构描述
- D. 测试计划
- E. b 和 c

5. Modern software engineering practices usually attempt to maintain SCI's in a project database or repository.

A. True

B. False

5. 现代软件工程实践通常试图将 SCI 保存在项目数据库或存储库中。

6. A data repository meta model is used to determine how

- A. information is stored in the repository
- B. well data integrity can be maintained
- C. easily the existing model can be extended

D. all of the above

6. 数据存储库元模型用于确定方式

- A. 信息存储在存储库中
- B. 可以保持良好的数据完整性
- C. 可以轻松扩展现有模型
- D. 以上所有内容

7. Many data repository requirements are the same as those for a typical database application.

A. True

B. False

7.许多数据存储库要求与典型数据库应用程序的要求相同。

8. The ability to track relationships and changes to configuration objects is one of the most important features of the SCM repository.

A. True

B. False

8.跟踪关系和配置对象更改的能力是 SCM 存储库最重要的功能之一。

9. Which of the following tasks is not part of software configuration management?

A. change control

B. reporting

C. statistical quality control

D. version control

9.以下哪项任务不属于软件配置管理？

A.改变控制

B.报告

C.统计质量控制

D.版本控制

10. A basic configuration object is a \_\_\_\_\_ created by a software engineer during some phase of the software development process.

A. program data structure B. hardware driver

C. unit of information D. all of the above

10.基本配置对象是由软件工程师在软件开发过程的某个阶段创建的\_\_\_\_\_。

A.程序数据结构 B.硬件驱动程序 C.信息单位 D.以上所有内容

11. Version control systems establish a change set as part of their primary functionality.

A. True

B. False

11.版本控制系统将变更集作为其主要功能的一部分。

12. Change control is not necessary if a development group is making use of an automated project database tool.

A. True

B. False

12.如果开发组正在使用自动化项目数据库工具，则无需进行更改控制。

13. When software configuration management is a formal activity the software configuration audit is conducted by the

A. development team B. quality assurance group

C. senior managers D. testing specialists

13.当软件配置管理是正式活动时，软件配置审核由

A.开发团队 B.质量保证小组 C.高级管理人员 D.测试专家

14. The primary purpose of configuration status reporting is to

A. allow revision of project schedule and cost estimates by project managers

B. evaluate the performance of software developers and organizations

C. make sure that change information is communicated to all affected parties

D. none of the above

14.配置状态报告的主要目的是

A.允许项目经理修改项目进度表和成本估算

B.评估软件开发人员和组织的绩效

C.确保将变更信息传达给所有受影响的各方

D.以上都不是

15. Configuration issues that need to be considered when developing Web and Mobile Apps include:

- A. content
- B. cost
- C. people
- D. politics

E. a, b, c

15.开发 Web 和移动应用程序时需要考虑的配置问题包括：

- A.内容
- B.成本
- C.人
- D.政治
- E. a, b, c

16. Web and Mobile App configuration objects can be managed in much the same way as conventional software configuration objects except for:

- A. content items
- B. functional items
- C. graphic items
- D. user items

16. Web 和 Mobile App 配置对象的管理方式与传统的软件配置对象大致相同，除了：

- A.内容项目
- B.功能项目
- C.图形项目
- D.用户项目

17. Content management establishes a process by which Web content is rendered on the user's display screen.

A. True

B. False

17.内容管理建立一个过程，通过该过程在用户的显示屏上呈现 Web 内容。

18. Change management for Web and Mobile Apps is best handled in agile manner.

A. True

B. False

18.最好以敏捷方式处理 Web 和移动应用程序的变更管理。

19. One reason that version control is difficult for WebApps is that in an uncontrolled environment, you can have multiple authors making changes to the same files from multiple locations without any realizing it.

A. True

B. False

19. WebApps 难以进行版本控制的一个原因是，在不受控制的环境中，您可以让多个作者从多个位置对相同的文件进行更改，而不会意识到这一点。

20. Requiring developers to check Web configuration items in and out and sending affected stakeholders e-mail messages automatically are good ways to deal with configuration auditing and reporting for WebApps.

A. True

B. False

20.要求开发人员自动检查 Web 配置项并自动发送受影响的利益相关者电子邮件，这是处理 WebApps 配置审核和报告的好方法。

## 第 30 章

1. Most technical software metrics described in this chapter represent indirect measures software attributes that are useful in the quantitative assessment of software quality.

A. True

B. False

1.本章中描述的大多数技术软件指标代表间接测量软件属性，这些属性可用于软件质量的定量评估。

2. Which these are reasons for using technical product measures during software development?

A. large body of scientific evidence supports their use

B. provides software engineers with an objective mechanism for assessing software quality

C. they allow all quality software quality information to be expressed unambiguously as a single number

D. all of the above

2.这些是在软件开发过程中使用技术产品措施的原因？

A.大量科学证据支持其使用

B.为软件工程师提供评估软件质量的客观机制

C.它们允许将所有质量软件质量信息明确地表示为单个数字

D.以上所有内容

3. Which measurement activity is missing from the list below?

A. design

B. feedback

C. measurement

D. quantification

3.下面的列表中缺少哪些测量活动？

A.设计

B.反馈

C.测量

D.量化

4. The Goal/Question/Metric (GQM) paradigm was developed as a technique for assigning blame for software failures.

A. True

B. False

4.目标/问题/度量（GQM）范例是作为一种为软件故障分配责任的技术而开发的。

5. One of the most important attributes for a software product metric is that it should be

A. easy to compute

B. qualitative in nature

C. reliable over time

D. widely applicable

5.软件产品指标最重要的属性之一就是它应该是

A.易于计算

B.性质定性

C.随着时间的推移可靠

D.广泛适用

6. In many cases metrics for one model may be used in later software engineering activities (e.g. design metrics may be used in test planning).

A. True B. False

6.在许多情况下，可以在稍后的软件工程活动中使用一个模型的度量（例如，可以在测试计划中使用设计度量）。

7. The function point metric is an example of metric that can be used to assist with technical decision-making based on the analysis model information, without making use of historical project data.

A. True

B. False

7.功能点度量是可用于在不使用历史项目数据的情况下基于分析模型信息协助技术决策的度量的示例。

8. The specification metrics proposed by Davis address which two characteristics of the software requirements?

- A. functionality and performance
- B. performance and completeness
- C. specificity and completeness
- D. specificity and functionality

8.戴维斯提出的规范指标解决了软件要求的两个特征？

- A.功能和性能
- B.表现和完整性
- C.特异性和完整性
- D.特异性和功能性

9. Architectural design metrics focus on

- A. architectural structure
- B. data structural relationships
- C. internal module complexity
- D. module effectiveness

E. a and d

9.建筑设计指标侧重于

- A.建筑结构
- B.数据结构关系
- C.内部模块的复杂性
- D.模块的有效性
- E. a 和 d

10. Which of the following is not a measurable characteristic of an object-oriented design?

- A. completeness
- B. efficiency
- C. size
- D. volatility

10.以下哪项不是面向对象设计的可测量特征？

- A.完整性
- B.效率
- C.大小
- D.波动性

11. The depth of inheritance tree (DIT) metric can give an OO software designer a reading on the

- A. attributes required for each class
- B. completion time required for system implementation
- C. complexity of the class hierarchy
- D. level of object reusability achieved

11.继承树深度（DIT）度量可以给 OO 软件设计者一个读数

- A.每个类所需的属性
- B.系统实施所需的完成时间
- C.类层次结构的复杂性
- D.实现了对象可重用性的水平

12. Because the class is the dominant unit in OO systems there is no call for the definition of class-oriented metrics.

- A. True
- B. False

12.由于该类是 OO 系统中的主导单元，因此不需要定义面向类的度量。

13. If you encounter a class with a large responsibility (large class size or CS value) you should consider

- A. making it a base class
- B. making it a subclass
- C. partitioning the class
- D. starting a new class hierarchy

13.如果您遇到责任较大的班级（大班级或 CS 值），您应该考虑

- A.使它成为基类
- B.使它成为一个子类
- C.分类
- D.开始一个新的类层次结构

14. Component-level metrics include measures of

- A. complexity
- B. coupling
- C. module cohesion
- D. performance

E. a, b, c

14. 组件级指标包括衡量标准

- A. 复杂性
- B. 耦合
- C. 模块凝聚力
- D. 表现
- E. a, b, c

15. Because the class is the dominant unit in OO systems very few metrics have been proposed for operations that reside within a class.

A. True

B. False

15. 由于该类是 OO 系统中的主导单元，因此对于驻留在类中的操作提出的指标很少。

16. Interface metrics are use to assess the complexity of the module's input and output relationships with external devices.

A. True

B. False

16. 接口度量用于评估模块与外部设备的输入和输出关系的复杂性。

17. Most WebApps can be easily characterized by judicious use of widely recognized suites of software metrics?

A. True

B. False

17. 大多数 WebApp 可以通过明智地使用广泛认可的软件指标套件来轻松表征？

18. Halstead's source code metrics are based on the number of Halstead 的源代码指标基于数量

- A. modules in the program
- B. operands in the program
- C. operators in the program
- D. volume elements in the program
- E. b and c

A. 程序中的模块 B. 计划中的操作数 C. 程序中的操作员  
D. 计划中的体积要素 E. b 和 c

19. Software testing metrics fall into two broad categories 软件测试指标分为两大类

- A. metrics that focus on defect removal effectiveness
- B. metrics that focus on test coverage
- C. metrics that estimate the duration of the testing process
- D. metrics that predict the number of test cases required
- E. b and d

A. 关注缺陷去除效果的指标 B. 关注测试覆盖率的指标  
C. 估计测试过程持续时间的指标  
D. 预测所需测试用例数量的指标 E. b 和 d

20. The IEEE software maturity index (SMI) is used to provide a measure of the

- A. maintainability of a software product based on its availability
- B. relative age of a software product being considered for retirement
- C. reliability of a software product following regression testing
- D. stability of a software product as it is modified during maintenance

D. stability of a software product as it is modified during maintenance

20. IEEE 软件成熟度指数 (SMI) 用于提供衡量标准

- A. 软件产品基于其可用性的可维护性
- B. 正在考虑退休的软件产品的相对年龄
- C. 回归测试后软件产品的可靠性
- D. 在维护期间修改的软件产品的稳定性



## 第 31 章

1. Effective software project management focuses on

- A. people, performance, payoff, product
- B. people, product, performance, process
- C. people, product, process, project
- D. people, process, payoff, product

1.有效的软件项目管理侧重于

- A.人, 绩效, 回报, 产品
- B.人, 产品, 性能, 过程
- C.人员, 产品, 流程, 项目
- D.人, 过程, 支付, 产品

2. Organizations that achieve high levels of maturity in people management have a higher likelihood of implementing effective software engineering processes.

- A. True
- B. False

2.在人员管理方面取得高度成熟度的组织更有可能实施有效的软件工程流程。

3. The first step in project planning is to

- A. determine the budget.
- B. select a team organizational model.
- C. determine the project constraints.
- D. establish the objectives and scope.

3.项目规划的第一步是

- A.确定预算。
- B.选择团队组织模型。
- C.确定项目限制。
- D.确定目标和范围。

4. Process framework activities are populated with

- A. milestones    B. work products
- C. QA points    D. all of the above

4.流程框架活动填充

- A.里程碑 B.工作产品 C.质量保证点 D.以上所有内容

5. Project management is less important for modern software development since most projects are successful and completed on time.

- A. True
- B. False

5.项目管理对于现代软件开发来说不那么重要, 因为大多数项目都是成功的并且按时完成。

6. Which of the following is not considered a stakeholder in the software process?

- A. customers
- B. end-users
- C. project managers
- D. sales people

6.以下哪项不被视为软件过程中的利益相关者?

- A.客户
- B.最终用户
- C.项目经理
- D.销售人员

7. The best person to hire as a project team leader is the most competent software engineering practitioner available.

- A. True
- B. False

7.作为项目团队负责人聘请的最佳人选是最有能力的软件工程师。

8. The best project team organizational model to use when tackling extremely complex problems is the

- A. closed paradigm
- B. open paradigm
- C. random paradigm
- D. synchronous paradigm

8.解决极其复杂问题时使用的最佳项目团队组织模型是

- A.封闭范式 B.开放范式 C.随机范式 D.同步范式

9. Which factors should be considered in choosing the organizational structure for a software team?

- A. degree of communication desired
- B. predicted size of the resulting program
- C. rigidity of the delivery date
- D. size of the project budget

E. a, b, c

9.在选择软件团队的组织结构时应考虑哪些因素？

- A.期望的沟通程度
- B.预测的结果程序的大小
- C.交货日期的刚性
- D.项目预算的规模
- E. a, b, c

10. One of the best ways to avoid frustration during the software development process is to

A. give team members more control over process and technical decisions.

B. give team members less control over process and technical decisions.

C. hide bad news from the project team members until things improve.

D. reward programmers based on their productivity.

10.在软件开发过程中避免沮丧的最佳方法之一是

- A.让团队成员更好地控制流程和技术决策。
- B.让团队成员减少对流程和技术决策的控制。
- C.隐藏项目团队成员的坏消息，直到事情有所改善。
- D.根据他们的生产力奖励程序员。

11. Small agile teams have no place in modern software development.

A. True

B. False

11.小型敏捷团队在现代软件开发中没有地位。

12. Which of these software characteristics is not a factor contributing to project coordination difficulties?

- A. interoperability
- B. performance
- C. scale
- D. uncertainty

12.哪些软件特征不是导致项目协调困难的因素？

- A.互操作性
- B.表现
- C.规模
- D.不确定性

13. Which of these software characteristics are used to determine the scope of a software project?

- A. context, lines of code, function
- B. context, function, communication requirements
- C. information objectives, function, performance
- D. communications requirements, performance, information objectives

13.哪些软件特性用于确定软件项目的范围？

- A.上下文，代码行，功能
- B.背景，功能，通信要求
- C.信息目标，功能，表现
- D.通信要求，性能，信息目标

14. The major areas of problem decomposition during the project scoping activity are the

- A. customer workflow
- B. functionality to be delivered
- C. process used to deliver functionality
- D. software process model
- E. b and c

14.项目范围界定活动期间问题分解的主要领域是

- A.客户工作流程 B.要交付的功能 C.用于提供功能的过程
- D.软件过程模型 E. b 和 c

15. Product and process decomposition occurs simultaneously as the project plan evolves.

A. True

B. False

15.随着项目计划的发展，产品和流程分解同时发生。

16. When can selected common process framework activities be omitted during process decomposition?

- A. when the project is extremely small in size
- B. any time the software is mission critical
- C. rapid prototyping does not require their use

D. never the activities are invariant

16.何时可以选择在流程分解过程中忽略的常用流程框架活动？

- A.当项目规模极小时
- B.任何时候软件都是关键任务
- C.快速原型制作不需要使用它们
- D.从来没有活动是不变的

17. How does a software project manager need to act to minimize the risk of software failure?

- A. double the project team size
- B. request a large budget
- C. start on the right foot
- D. track progress

E. c and d

17.软件项目经理如何采取行动以最大限度地降低软件故障的风险？

- A.将项目团队规模扩大一倍
- B.要求大预算
- C.从右脚开始
- D.跟踪进度
- E. c 和 d

18. The W5HH principle contains which of the following questions?

- A. Why is the system being developed?
- B. What will be done by whom?
- C. Where are they organizationally located?
- D. How much of each resource is required?

E. a, c d

18. W5HH 原则包含以下哪些问题？

- A.为什么要开发系统？
- B.由谁做什么？
- C.他们在组织中的位置？
- D.每种资源需要多少？
- E. a, c d

19. Which of these are critical practices for performance-based project management?

- A. assessing product usability
- B. defect tracking against quality targets
- C. empirical cost estimation
- D. formal risk management

E. b, c, d

19.哪些是基于绩效的项目管理的关键做法？

- A.评估产品的可用性
- B.针对质量目标的缺陷跟踪
- C.经验成本估算
- D.正式的风险管理
- E. b, c, d

## 第 32 章

1. Which of these are valid reasons for measuring software processes, products, and resources?

- A. to characterize them
- B. to evaluate them
- C. to price them
- D. to improve them

E. a, b, d

1. 哪些是衡量软件流程、产品和资源的正当理由？

A. 表征它们 B. 评估它们 C. 为它们定价 D. 改进它们

2. Process indicators enable a software project manager to

- A. assess the status of an on-going project
- B. track potential risks
- C. adjust work flow or tasks

D. none of the above

2. 流程指标使软件项目经理能够

- A. 评估正在进行的项目的状态
- B. 跟踪潜在风险
- C. 调整工作流程或任务
- D. 以上都不是

3. Public metrics are used

- A. to evaluate the performance of software development teams.
- B. to appraise the performance of individual team members.
- C. to make strategic changes to the software process.
- D. to make tactical changes during a software project.

E. c and d

3. 使用公共指标

- A. 评估软件开发团队的绩效。
- B. 评估个别团队成员的表现。
- C. 对软件过程进行战略性更改。
- D. 在软件项目中进行战术变更。

4. Which of the following items are not measured by software project metrics?

- A. inputs
- B. markets
- C. outputs
- D. results

4. 以下哪些项目不是由软件项目指标衡量的？

- A. 投入
- B. 市场
- C. 产出
- D. 结果

5. Software quality and functionality must be measured indirectly.

- A. True
- B. False

5. 必须间接测量软件质量和功能。

6. Which of following are advantages of using LOC (lines of code) as a size-oriented metric?

- A. LOC is easily computed.
- B. LOC is a language dependent measure.
- C. LOC is a language independent measure.
- D. LOC can be computed before a design is completed.

6. 使用 LOC（代码行）作为面向大小的度量标准，以下哪项优势？

- A. LOC 易于计算。
- B. LOC 是一种语言相关的衡量标准。
- C. LOC 是一种独立于语言的衡量标准。
- D. 可以在设计完成之前计算 LOC。

7. Which of the following are advantages of using function points (FP) as a measure of the functionality delivered by a software application?

- A. FP is easily computed.
- B. FP is a language dependent measure.
- C. FP is a language independent measure.
- D. FP can be computed before a design is completed.

E. c and d

7.使用功能点 (FP) 作为软件应用程序提供的功能的衡量标准, 以下哪项是优势?

- A. FP 很容易计算。 B. FP 是一种依赖于语言的措施。
- C. FP 是一种独立于语言的衡量标准。
- D. FP 可以在设计完成之前计算。 E. c 和 d

8. There is no need to reconcile LOC and FP measures since each is meaningful in its own right as a project measure.

A. True

B. False

8.没有必要协调 LOC 和 FP 措施, 因为每个措施本身都是有意义的项目措施。

9. Object-Oriented project measures may be combined with historical project data to provide metrics that aid in project estimation.

A. True

B. False

9.面向对象的项目测量可以与历史项目数据相结合, 以提供有助于项目估算的指标。

10. Use-Case oriented metrics are computed directly from UML diagrams they are often used as normalization measures.

A. True B. False

10.面向用例的度量直接从 UML 图计算, 它们通常用作规范化度量。

11. Which of the following is not a measure that can be collected from a Web application project?

A. Customization index

- B. Number of dynamic objects
- C. Number of internal page links
- D. Number of static web pages

11.以下哪项不是可以从 Web 应用程序项目中收集的度量?

- A.定制指数
- B.动态对象的数量
- C.内部页面链接的数量
- D.静态网页的数量

12. Which of the following software quality factors is most likely to be affected by radical changes to computing architectures?

- A. operation
- B. transition
- C. revision

D. none of the above

12.计算架构的根本变化最有可能影响以下哪些软件质量因素?

- A.操作
- B.过渡
- C.修订
- D.以上都不是

13. Which of the following provide useful measures of software quality?

- A. correctness, performance, integrity, usability
- B. reliability, maintainability, integrity, sales
- C. correctness, maintainability, size, satisfaction
- D. correctness, maintainability, integrity, usability

13.以下哪项提供了有用的软件质量指标?

- A.正确性, 性能, 完整性, 可用性
- B.可靠性, 可维护性, 完整性, 销售
- C.正确性, 可维护性, 大小, 满意度
- D.正确性, 可维护性, 完整性, 可用性

14. A software quality metric that can be used at both the process and project levels is defect removal efficiency (DRE). 可在过程和项目级别使用的软件质量度量标准是缺陷去除效率 (DRE) A. True B. False

15. Why is it important to measure the process of software engineering and software it produces?

- A. It is really not necessary unless the project is extremely complex.
- B. To determine costs and allow a profit margin to be set.
- C. To determine whether a software group is improving or not.
- D. To make software engineering more like other engineering processes.

15.为什么衡量软件工程和软件产生的过程很重要？

- A.除非项目非常复杂，否则实际上没有必要。
- B.确定成本并允许设定利润率。
- C.确定软件组是否正在改进。
- D.使软件工程更像其他工程流程。

16. To be an effective aid in process improvement the baseline data used must be:

- A. based on reasonable guestimates from past projects
- B. measured consistently across projects
- C. drawn from similar projects
- D. based on all previously completed projects
- E. b and c

16.要成为过程改进的有效帮助，所使用的基准数据必须是：

- A.基于过去项目的合理估计
- B.在各个项目中持续衡量
- C.来自类似项目
- D.基于所有先前完成的项目
- E. b 和 c

17. Baseline data must be collected in an on-going

manner and cannot be computed by formal study of historical project data.

- A. True
- B. False

17.基线数据必须以持续的方式收集，不能通过对历史项目数据的正式研究来计算。

18. Small software organizations are not likely to see any economic return from establishing software metrics program.

- A. True
- B. False

18.小型软件组织不太可能从建立软件指标计划中看到任何经济回报。

19. The software metrics chosen by an organization are driven by the business or technical goals an organization wishes to accomplish.

- A. True
- B. False

19.组织选择的软件指标是由组织希望实现的业务或技术目标驱动的。

### 第 33 章

1. Since project estimates are not completely reliable, they can be ignored once a software development project begins.

A. True

B. False

1. 由于项目估算并不完全可靠，因此一旦软件开发项目开始，就可以忽略它们。

2. The objective of software project planing is to

A. convince the customer that a project is feasible.

B. make use of historical project data.

C. enable a manager to make reasonable estimates of cost and schedule.

D. determine the probable profit margin prior to bidding on a project.

2. 软件项目计划的目标是

A. 让客户相信项目是可行的。

B. 利用历史项目数据。

C. 使经理能够合理估计成本和进度。

D. 在投标项目之前确定可能的利润率。

3. The project scope is defined as a means of bounding the system

A. functionality

B. performance

C. costs

D. schedule

E. a and b

3. 项目范围被定义为限制系统的一种手段

A. 功能

B. 表现

C. 费用

D. 时间表

E. a 和 b

4. Software feasibility is based on which of the following

A. business and marketing concerns

B. scope, constraints, market

C. technology, finance, time, resources

D. technical prowess of the developers

4. 软件可行性基于以下哪项

A. 业务和营销问题

B. 范围，约束，市场

C. 技术，财务，时间，资源

D. 开发人员的技术实力

5. The number of people required for a software project is determined

A. after an estimate of the development effort is made.

B. by the size of the project budget.

C. from an assessment of the technical complexity of the system.

D. all of the above

5. 确定软件项目所需的人数

A. 在估算开发工作量之后。

B. 按项目预算的规模。

C. 评估系统的技术复杂性。

D. 以上所有内容

6. Reusable software components must be

A. catalogued for easy reference.

B. standardized for easy application.

C. validated for easy integration.

D. all of the above

6. 可重复使用的软件组件必须是

A. 编目以便于参考。

B. 标准化，易于应用。

C. 经过验证易于集成。

D. 以上所有内容

7. The software engineering environment (SEE) consists of which of the following?

- A. customers B. developers C. hardware platforms  
D. software tools E. c and d

7. 软件工程环境 (SEE) 包括以下哪项?

- A. 客户 B. 开发人员 C. 硬件平台 D. 软件工具 E. c 和 d

8. Software project estimation techniques can be broadly classified under which of the following headings? 软件项目估算技术可以大致归类为以下哪个标题

- A. automated processes  
B. decomposition techniques  
C. empirical models  
D. regression models

E. b and c

- A. 自动化流程 B. 分解技术 C. 经验模型 D. 回归模型 E. b 和 c

9. The size estimate for a software product to be built must be based on a direct measure like LOC. 要构建的软件产品的大小估计必须基于像 LOC 这样的直接测量

- A. True B. False

10. Problem-based estimation is based on problem decomposition which focuses on

- A. information domain values B. project schedule  
C. software functions D. process activities

E. a and c

10. 基于问题的估计是基于关注的问题分解

- A. 信息域值 B. 项目进度表 C. 软件功能 D. 流程活动

11. LOC-based estimation techniques require problem decomposition based on

- A. information domain values B. project schedule  
C. software functions D. process activities

11. 基于 LOC 的估计技术需要基于的问题分解

- A. 信息域值 B. 项目进度表 C. 软件功能 D. 流程活动

12. FP-based estimation techniques require problem decomposition based on

A. information domain values

- B. project schedule  
C. software functions  
D. process activities

12. 基于 FP 的估计技术需要基于的问题分解

- A. 信息域值 B. 项目进度表  
C. 软件功能 D. 流程活动

13. Process-based estimation techniques require problem decomposition based on

- A. information domain values  
B. project schedule  
C. software functions  
D. process activities

E. c and d

13. 基于过程的估计技术需要基于的问题分解

- A. 信息域值 B. 项目进度表 C. 软件功能  
D. 流程活动 E. c 和 d

14. Unlike a LOC or function point each person's "use-case" is exactly the same size.

A. True B. False

14. 与 LOC 或功能点不同, 每个人的“用例”大小完全相同。

15. When agreement between estimates is poor the cause may often be traced to inadequately defined project scope or inappropriate productivity data.

A. True B. False

15. 如果估计数之间的一致性很差, 原因通常可以追溯到项目范围不充分或生产率数据不合适。



16. Empirical estimation models are typically based on  
A. expert judgement based on past project experiences

B. refinement of expected value estimation

C. regression models derived from historical project data

D. trial and error determination of the parameters and coefficients

16.经验估计模型通常基于

A.基于过去项目经验的专家判断

B.对期望值估计的细化

C.来自历史项目数据的回归模型

D.试验和误差确定参数和系数

17. COCOMO II is an example of a suite of modern empirical estimation models that require sizing information expressed as: *COCOMO II 是一套现代经验估计模型的例子, 需要提供如下信息*

A. function points B. lines of code

C. object points D. any of the above

A.功能点 B.代码行 C.对象点 D.以上任何一项

18. Putnam's software equation is a dynamic empirical model that has two independent parameters: a size estimate and an indication of project duration in calendar months or years. 普特南的软件方程是一个动态的经验模型, 它有两个独立的参数: 规模估计和日历月或年中项目持续时间的指示 A. True B. False

19. Function points are of no use in developing estimates for object-oriented software. 在开发面向对象的软件的估算时, 功能点无用户 A. True B. False

20. In agile software development estimation techniques focus on the time required to complete each *在敏捷软件开发中, 估算技术侧重于完成每项技术所需的时间* A. increment B. scenario C. task D. use-case  
A.增量 B.情景 C.任务 D.用例

21. It is possible to use a modified function point technique to develop estimates for Web applications. A. True B. False

21.可以使用修改的功能点技术来开发 Web 应用程序的估计值。

22. Using a statistical technique like decision tree analysis can provide some assistance in sorting out the true costs associated with the make-buy decision. A. True B. False

22.使用像决策树分析这样的统计技术可以提供一些帮助, 以找出与购买决策相关的真实成本。

23. Outsourcing always provides a simple means of acquiring software at lower cost than onsite development of the same product.

A. True

B. False

23.外包总是以比同一产品的现场开发更低的成本提供一种简单的软件获取方式。

## 第 34 章

1. Software projects are inevitably late and there is nothing that can explain why.

A. True

B. False

1. 软件项目不可避免地迟到了，没有任何东西可以解释原因。

2. It is unethical to undertake a project that you know in advance cannot be completed by the customer's deadline, unless you inform the customer of the risk and establish a project plan that can deliver the needed system incrementally.

A. True

B. False

2. 除非您告知客户风险并制定可逐步提供所需系统的项目计划，否则在事先无法完成的项目中进行无法完成的项目是不道德的。

3. Which of the following is not one of the guiding principles of software project scheduling:

A. compartmentalization

B. market assessment

C. time allocation

D. effort validation

3. 以下哪项不是软件项目调度的指导原则之一：

A. 区域化

B. 市场评估

C. 时间分配

D. 努力验证

4. Doubling the size of your software project team is guaranteed to cut project completion time in half.

A. True

B. False

4. 加倍软件项目团队的规模可以保证将项目完成时间缩短一半。

5. The software equation can be used to show that by extending the project deadline slightly

A. fewer people are required

B. you are guaranteed to meet the deadline

C. more lines of code can be produced

D. none of the above

5. 软件方程式可用于表明通过略微延长项目截止日期

A. 需要更少的人 B. 保证在截止日期前完成

C. 可以生成更多代码行 D. 以上都不是

6. The 40-20-40 rule suggests that the least of amount of development effort be spent on

A. estimation and planning B. analysis and design

C. coding D. testing

6. 40-20-40 规则表明花费的开发工作量最少

A. 估计和计划 B. 分析和设计 C. 编码 D. 测试

7. A task set is a collection of 任务集是一个集合

A. engineering work tasks, milestones, deliverables

B. task assignments, cost estimates, metrics

C. milestones, deliverables, metrics

D. responsibilities, milestones, documents

A. 工程工作任务，里程碑，可交付成果

B. 任务分配，成本估算，指标

C. 里程碑，可交付成果，指标

D. 职责，里程碑，文件

8. The task (activity) network is a useful mechanism for

A. computing the overall effort estimate

B. detecting intertask dependencies

C. determining the critical path

D. specifying the task set to the customer E. b and c

8. 任务（活动）网络是一种有用的机制

A. 计算总体努力估计 B. 检测 intertask 依赖关系

C. 确定关键路径 D. 指定客户的任务集

9. Tasks that lie on the critical path in a task network may be completed in any order as long as the project is on schedule.

A. True B. False

9.只要项目按计划进行, 任务网络中关键路径上的任务可以按任何顺序完成。

10. Two tools for computing critical path and project completion times from activity networks are

A. CPM B. DRE C. FP D. PERT E. a and d

10.用于从活动网络计算关键路径和项目完成时间的两个工具是

A. CPM B. DRE C. FP D. PERT E. a 和 d

11. Timeline charts assist project managers in determining what tasks will be conducted at a given point in time.

A. True

B. False

11.时间表图表帮助项目经理确定在给定时间点将执行哪些任务。

12. The best indicator of progress on a software project is the completion

A. of a defined engineering activity task

B. of a successful budget review meeting on time

C. and successful review of a defined software work product

D. and successful acceptance of project prototype by the customer

12.软件项目进展的最佳指标是完成

A.定义的工程活动任务的 A.

B.按时成功举行预算审查会议

C.成功审查已定义的软件工作产品

D.并由客户成功接受项目原型

13. Since iterative process model work best for object-oriented projects it is impossible to determine whether an increment will be completed on time or not.

A. True

B. False

13.由于迭代过程模型最适合面向对象的项目, 因此无法确定增量是否能够按时完成。

14. WebApp projects only require the creation of a macro schedule.

A. True

B. False

14. WebApp 项目只需要创建宏计划。

15. The purpose of earned value analysis is to

A. determine how to compensate developers based on their productivity

B. provide a quantitative means of assessing software project progress

C. provide a qualitative means of assessing software project progress

D. set the price point for a software product based on development effort

15.挣值分析的目的是

A.确定如何根据生产力来补偿开发人员

B.提供评估软件项目进度的定量方法

C.提供评估软件项目进展的定性方法

D.根据开发工作量设置软件产品的价格点

16. Earned value analysis is a technique that allows managers to take corrective action before a project crisis develops.

A. True

B. False

16.挣值分析是一种技术, 允许管理人员在项目危机发生之前采取纠正措施。

## 第 35 章

1. Proactive risk management is sometimes described as fire fighting.

A. True

B. False

1.主动风险管理有时被称为消防。

2. Software risk always involves two characteristics

A. fire fighting and crisis management

B. known and unknown risks

C. uncertainty and loss

D. staffing and budget

2.软件风险总是涉及两个特征

A.消防和危机管理

B.已知和未知的风险

C.不确定性和损失

D.人员配置和预算

3. Three categories of risks are

A. business risks, personnel risks, budget risks

B. project risks, technical risks, business risks

C. planning risks, technical risks, personnel risks

D. management risks, technical risks, design risks

3.三类风险是

A.业务风险, 人员风险, 预算风险

B.项目风险, 技术风险, 业务风险

C.规划风险, 技术风险, 人员风险

D.管理风险, 技术风险, 设计风险

4. Generic risks require far more attention than product-specific risks.

A. True

B. False

4.通用风险需要比产品特定风险更多的关注。

5. A risk item checklist would contain known and predictable risks from which of these categories?

A. product size B. development environment

C. staff size D. process definition E. all of the above

5.风险项目清单将包含这些类别中已知和可预测的风险？

A.产品尺寸 B.发展环境 C.员工人数 D.流程定义 E.以上所有内容

6. Questions that should be asked to assess the overall project risk include:

A. Have top managers formally committed to support the project?

B. Are end-users committed to the project and proposed system being built?

C. Are requirement fully understood by development team and customers?

D. Does the proposed budget have time allocated for marketing?

E. a, b, c

6.应评估整体项目风险的问题包括：

A.高层管理人员是否正式承诺支持该项目？

B.最终用户是否致力于项目和建议的系统？

C.开发团队和客户是否完全理解需求？

D.拟议预算是否有时间分配给营销？

E. a, b, c

7. Software risk impact assessment should focus on consequences affecting

A. planning, resources, cost, schedule

B. marketability, cost, personnel

C. business, technology, process

D. performance, support, cost, schedule

7.软件风险影响评估应侧重于影响的后果

A.规划, 资源, 成本, 进度

B.市场性, 成本, 人员

C.业务, 技术, 流程

D.绩效, 支持, 成本, 进度

8. Risk projection attempts to rate each risk in two ways

- A. likelihood and cost
- B. likelihood and impact
- C. likelihood and consequences
- D. likelihood and exposure

8. 风险预测尝试以两种方式对每种风险进行评级

- A. 可能性和成本 B. 可能性和影响
- C. 可能性和后果 D. 可能性和暴露

9. Risk tables are sorted by

- A. probability and cost
- B. probability and impact
- C. probability and consequences
- D. probability and exposure

9. 风险表按排序

- A. 概率和成本 B. 概率和影响 C. 概率和后果 D. 概率和风险

10. Individual team members can make their own estimate for a risk probability and then develop a consensus value.

- A. True B. False

10. 个人团队成员可以自己估计风险概率，然后建立共识值。

11. Which factors affect the probable consequences likely if a risk does occur?

- A. risk cost
- B. risk timing
- C. risk scope
- D. risk resources

- E. b and c

11. 如果风险确实发生，哪些因素会影响可能的后果？

- A. 风险成本
- B. 风险时间
- C. 风险范围
- D. 风险资源
- E. b 和 c

12. The reason for refining risks is to break them into smaller units having different consequences. 提炼风险的原因是将它们分解成具有不同后果的较小单位 A. True B. False

13. Effective risk management plan needs to address which of these issues?

- A. risk avoidance B. risk monitoring
- C. contingency planning D. all of the above

13. 有效的风险管理计划需要解决哪些问题？

- A. 避免风险 B. 风险监测 C. 应急计划 D. 以上所有内容

14. Risk monitoring involves watching the risk indicators defined for the project and not determining the effectiveness of the risk mitigation steps themselves.

- A. True B. False

14. 风险监测涉及观察为项目定义的风险指标，而不是确定风险缓解步骤本身的有效性。

15. Hazard analysis focuses on the identification and assessment of potential hazards that can cause

- A. project termination
- B. schedule slippage
- C. cost overruns
- D. an entire system to fail

15. 危害分析侧重于识别和评估可能造成的潜在危害

- A. 项目终止 B. 计划滑点 C. 成本超支 D. 整个系统失败

16. Risk information sheets (RIS) are never an acceptable substitute for a full risk mitigation, monitoring, and management (RMMM) plan.

- A. True B. False

16. 风险信息表 (RIS) 绝不是完全风险缓解，监测和管理 (RMMM) 计划的可接受替代品。

## 第 36 章

1. How much effort is typically expended by a software organization on software maintenance?

A. 20 percent

B. 40 percent

C. 60 percent

D. 80 percent

1. 软件组织通常在软件维护方面花费了多少精力？

A. 20%

B. 40%

C. 60%

D. 80%

2. Software supportability is not concerned with either the provision of hardware or infrastructure.

A. True

B. False

2. 软件可支持性与硬件或基础设施的提供无关。

3. Business process reengineering is often accompanied by software reengineering.

A. True

B. False

3. 业务流程再造通常伴随着软件再造。

4. Which of the following is not an example of a business process?

A. designing a new product

B. hiring an employee

C. purchasing services

D. testing software

4. 以下哪项不是业务流程的示例？

A. 设计新产品

B. 雇用一名员工

C. 购买服务

D. 测试软件

5. Business process reengineering does not have a start or end, it is an evolutionary process.

A. True B. False

5. 业务流程再造没有开始或结束，这是一个渐进的过程。

6. Which of the following activities is not part of the software reengineering process model?

A. forward engineering B. inventory analysis

C. prototyping D. reverse engineering

6. 以下哪些活动不属于软件再造流程模型？

A. 正向工程 B. 库存分析 C. 原型设计 D. 逆向工程

7. Software reengineering process model includes restructuring activities for which of the following work items? 软件再造过程模型包括以下哪些工作项的重组活动

A. code B. documentation

C. data D. all of the above

A. 代码 B. 文件 C. 数据 D. 以上所有内容

8. Which of the following is not an issue to consider when reverse engineering? 逆向工程时需要考虑以下哪个问题

A. abstraction level B. completeness

C. connectivity D. directionality

A. 抽象级别 B. 完整性 C. 连通性 D. 方向性

9. Reverse engineering of data focuses on

A. database structures B. internal data structures

C. both a and b D. none of the above

9. 数据的逆向工程着重于

A. 数据库结构 B. 内部数据结构 C. a 和 b D. 以上都不是

10. The first reverse engineering activity involves

seeking to understand 第一次逆向工程活动涉及寻求理解

A. data B. processing

C. user interfaces D. none of the above

A. 数据 B. 处理 C. 用户界面 D. 以上都不是

11. Reverse engineering should proceed the reengineering of any user interface.

A. True

B. False

11.逆向工程应该进行任何用户界面的重新设计。

12. Which of these benefits can be achieved when software is restructured?

A. higher quality programs

B. reduced maintenance effort

C. software easier to test

D. all of the above

12.重组软件时可以实现哪些好处？

A.更高质量的课程

B.减少维护工作量

C.软件更容易测试

D.以上所有内容

13. Code restructuring is a good example of software reengineering.

A. True

B. False

13.代码重组是软件再造的一个很好的例子。

14. Which of these is not an example of data restructuring?

A. data analysis

B. data name rationalization

C. data record standardization

D. none of the above

14.其中哪一个不是数据重组的例子？

A.数据分析

B.数据名称合理化

C.数据记录标准化

D.以上都不是

15. Forward engineering is not necessary if an existing software product is producing the correct output.

A. True

B. False

15.如果现有软件产品正在生成正确的输出，则无需进行正向工程。

16. Reengineering client/server systems begins with a thorough analysis of the business environment that encompasses the existing computing system.

A. True

B. False

16.重新设计客户端/服务器系统首先要对包含现有计算系统的业务环境进行全面分析。

17. The only time reengineering enters into work with a legacy system is when its components will be implemented as objects.

A. True

B. False

17.重新设计与旧系统一起工作的唯一时间是组件将作为对象实现。

18. The cost benefits derived from reengineering are realized largely due to decreased maintenance and support costs for the new software product.

A. True

B. False

18.重新设计所带来的成本效益主要是由于新软件产品的维护和支持成本降低所致。