

🎉 Congratulations! You passed!

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To pass 75% or
higher

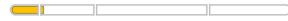
Go to next item

You reached new skill levels

Project Management

Your score: 56 (↑24) Beginner

Keep going! At a beginner level, you have a working knowledge and are able to pass beginner content. You have limited experience applying it.



Planning

Your score: 64 (↑25) Beginner

Keep going! At a beginner level, you have a working knowledge and are able to pass beginner content. You have limited experience applying it.



1. Which of these are desirable characteristics of a software design? Choose the three correct answers.

1 / 1 point

- ☐ tight coupling
- ☒ flexible

✔ Correct

Correct! We strive to make code flexible, which is to say that it can be adapted for new requirements

- ☒ reusability

✔ Correct

Correct! Software designers hate to repeat themselves. If code is reusable, then there is less overall coding to do.

- ☒ maintainability

✔ Correct

Correct! Code should be maintainable, which means the code can be modified or extended easily.

2.

1 / 1 point

Identify two outcomes of the design process. Choose the two correct answers.

- ☒ conceptual design

✔ Correct

Correct! Conceptual design covers the early part of design, where the problem is translated into a high-level solution.

- ☐

code implementation

- ☒

technical design

✔ Correct

Correct! Technical design gets even closer to the actual implementation.

- ☐

design plan

3. You are writing out a CRC card for a bank machine component. Under which section should you put "Track Cash Remaining."

1 / 1 point

- ☐

Risk

- ☐

Collaborator

- ☒

Responsibility

- ☐ Class

✔ Correct

Correct! One of the responsibilities of this bank machine is to track how much money it has left.

4.

1 / 1 point

Which two of these are likely to be a part of conceptual design?

- ☐ Abstract data types

- ☒ Mockups

✔ Correct

Correct! Mockups help the designers decide on relationships between components.

- ☐

Methods

- ☒ CRC Cards

✔ Correct

Correct! CRC cards are used to get a sense of the classes, components, etc. that your design may have.

5. When during the design process are you likely to produce CRC cards the most?

1 / 1 point

- ☒ conceptual design
- ☐ technical design
- ☐
- customer meetings
- ☐
- after releasing the software

☒ **Correct**
Correct! CRC cards are most often created and used in conceptual design, especially when the team is almost ready to transition into technical design.

6. Which of the following are examples of non-functional requirements? **Choose the three correct answers.**

1 / 1 point

- ☐ purpose
- ☒ security

☒ **Correct**
Correct. The security of a system and how it protects data may be as important as its function. Remember that the function is the system's reason for being.

- ☒ availability

☒ **Correct**
Correct! That the functions of the system are available for use is as important as the functions themselves. Remember that the function is the system's reason for being.

- ☒ performance

☒ **Correct**
Correct. The speed and responsiveness of a system is often as important as what its actual function is! Remember that the function is the system's reason for being.

7.

1 / 1 point

Select the three categories of objects generally present in object-oriented software.

- ☒ entity

☒ **Correct**
Correct! Entity objects are the backbone of the system, and often correspond to real life objects.

- ☒ control

☒ **Correct**
Correct! Control objects manage the interactions of other objects.

- ☒ boundary

☒ **Correct**
Correct! Boundary objects typically interface with another system.

- ☐

tool

8.

1 / 1 point

An object which is responsible for showing data to the user could be considered which category of object?

- ☒ boundary
- ☐

control

- ☐ representation
- ☐ entity

☒ **Correct**
Correct! This object interacts with another "system" (the user), so it is considered a boundary object.

9. You are planning a Professor class as part of your software design. Which of these will you consider a collaborator ? **Choose the two correct answers.**

1 / 1 point

- ☐

Track Employment Status

- ☒ Student

☒ **Correct**
Correct! The student and professor classes will likely be collaborators.

- ☒

Course

☒ **Correct**
Correct! Typically the Professor will have to teach a course, so a course object is likely to be a collaborator.

- ☐ Teach Course

10. What is a requirement of this form called? "As a ____, I want to ____, so that ____".

1 / 1 point

- ☒ user story
- ☐ key concept
- ☐

conceptual mockup

- ☐ entity abstraction

☒ **Correct**
Correct! User stories help you to identify the functional requirements of the system.

11. You are a programmer creating software for a bank machine system. Which section of a CRC card for the bank machine component will the "User" go into?

1 / 1 point

- ☐ Class
- ☐ Responsibility
- ☒ Collaborator
- ☐ Object

✔ Correct

Correct! Users collaborate with the bank machine component.

12. During conceptual design, you will talk about... (Choose the three correct answers):

1 / 1 point

☒ mockups

✔ Correct

Correct. Mockups are important for customer communication and to start to think about the architecture.

☐

technical diagrams

☒ tradeoffs

✔ Correct

Correct. Every design decision involves trade-offs, even in the early stages of design.

☒ requirements

✔ Correct

Correct! Customer requirements of what the system should be and do are the start for all discussions of the design.