

Course Description

This four-week course covers practical techniques to elicit and express software requirements from client interactions. Upon successful completion of this course, you will be able to:

• Create clear requirements to drive effective software development

• Visualize client needs using low-fidelity prototypes

• Maximize the effectiveness of client interactions

• Adapt to changing product requirements

SOFTWARE PRODUCT MANAGEMENT Specialization

Course 3: CLIENT NEEDS & SOFTWARE REQUIREMENTS

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Module 1

Introduction to Requirements

Introduction: Specialization Preview

2 minutes

Introduction: Introduction to Client Needs & Client Needs

2 mins

Course Resources: Client Needs & Software Requirements - Course Notes & Glossary

Lesson 3.1.1(A): What is a Requirement/Requirement Activities

16 minutes

• Summarize the concept of a software requirement

• Summarize the types of activities associated with requirements:

- Summarize the concept of elicitation

- Summarize the concept of requirements analysis

- Summarize the concept of requirements management

- Summarize the concept of requirements prioritization

- Summarize the concept of requirements expression

Lesson 3.1.2(A, B, C, D): Types of Requirements

25 minutes

• Differentiate between the different types of requirements

- Summarize the concept business requirement

- Summarize the concept business rule

- Summarize the concept user requirement

- Summarize the concept functional requirement

- Summarize the concept non-functional requirement

- Summarize the concept external interfaces

- Summarize the concept physical setting

- Summarize the concept developer constraints

Quiz: Module 1 Practice Quiz – Ungraded

(15 questions on types of requirements)

Passing threshold - 80%

Course weight 0%

Lesson 3.1.3: Controlling Scope

12 minutes

• Recognize that changes to software requirements are common and need to be accounted for

• Summarize the concept of vision

• Summarize the concept of scope

• Summarize the concept of managing expectations

• Summarize the concept of defending against scope creep and why it's important

Lesson 3.1.4: Requirements and Design

6 minutes

• Differentiate between design and requirements

Reading: Module 1: Supplemental Resources

Module Assessment: Quiz 1 – Graded (8 questions)

Passing threshold - 70%

Course weight 15%

Discussions: Week 1

Module 2

User Interaction

Lesson 3.2.1: Restaurant Scenario

1 minute

Lesson 3.2.2(A, B): User Considerations

17 minutes

• Summarize the concept user

- List the types of users (primary, secondary, tertiary)

- Summarize the term stakeholder

- List the characteristics of users

• List some issues that may arise with user interactions

• List types of human limitations

Discussions: Cultural Differences

Lesson 3.2.3(A): Involving Clients

14 minutes

• Summarize how to properly interact with clients

• Summarize how to create a list of requirements

• Summarize the key aspects of customer interactions

• List key questions to enable elicitation

Reading: Good Questions to Ask Your Client

Lesson 3.2.4: Use Cases

9 minutes

• Generate a use case

- Summarize the concept of a use case

- List what goes into a use case description (name, actors, goal, trigger, pre-condition, post-condition, basic flow, exceptions, qualities)

Lesson 3.2.5: Wireframes

6 minutes

• Summarize how a wireframe works

• Deconstruct requirements from a wireframe

Peer Graded Assignment: Wireframes Assignment

Passing threshold - 80%

Course weight 5%

Lesson 3.2.6: Storyboards

9 minutes

• Summarize how a storyboard works

• Deconstruct requirements from a storyboard

Reading: Module 2: Supplemental Resources

Module Assessment: Quiz 2 – Graded (8 questions)

Passing threshold - 70%

Course weight 10%

Discussions: Week 2

Module 3

Writing Requirements

Lesson 3.3.1: Agile Requirements

6 minutes

• Recognize that requirements is an aspect of Agile

• Recall the basic principles of Agile

Lesson 3.3.2(A, B): User Stories

18 minutes

• Generate a user story

- Summarize the concept of a user story

- Recognize what makes a good user story

- Recall the purpose of user stories

• Deconstruct a user story

- Recognize when a user story is too large

- Analyze a user story

Peer Graded Assignment: User Stories Assignment

Passing threshold - 80%

Course weight 5%

Reading: User Stories Assignment Proposed Solution (Locked)

Lesson 3.3.3: Acceptance Tests

8 minutes

• Generate an acceptance test from user stories

- Summarize the concept of an acceptance test

- Recall the format of an acceptance test

Lesson 3.3.4(A): Product Backlog

12 minutes

• Generate a backlog

- Summarize the concept of a product backlog

- Identify priorities of user stories (by client)

- Recall how backlogs fit into Scrum iteration and release plans

Lesson 3.3.5: Story Maps

8 minutes

• Assemble a story map

- Summarize the concept of a story map

- Recall the structure of a story map

- Recognize the application of a story map

- Recognize if a story map has missing aspects or inconsistencies

- Summarize benefits of story maps

Reading: Module 3: Supplemental Resources

Module Assessment: Quiz 3 – Graded (8 questions)

Passing threshold - 70%

Course weight 10%

Discussions: Week 3

Module 4

Quality Requirements

Lesson 3.4.1(A): Criteria for User Stories

11 minutes

• Summarize the criteria for user stories

14.1.1 Summarize the concept of correct

14.1.2 Summarize the concept of complete

14.1.3 Summarize the concept of consistent

14.1.4 Summarize the concept of clear

14.1.6 Summarize the concept of traceable

14.1.7 Summarize the concept of verifiable

• Recognize if user stories meet the criteria of feasible, manageable and simple

Reading: Ambiguous Requirements Study Guide

Lesson 3.4.2: Ambiguous Requirements

23 minutes

• Determine if a user story is free of ambiguity

15.1.1 Summarize the concept of ambiguous requirements

15.1.2 Recognize if the requirement is detailed enough

15.1.3 Recognize ambiguous terms

15.1.4 Clarify ambiguous terms

Discussions: Ambiguous Requirements

Reading: Ambiguous Requirements Quiz Pre-Reading

Peer Graded Assignment: Ambiguous Requirements Quiz

Passing threshold - 80%

Course weight 5%

Lesson 3.4.3: Course Summary

5 minutes

• Summarize the concepts learned in the course

Reading: Module 4: Supplemental Resources

Module Assessment: Quiz 4 – Graded (8 questions)

Passing threshold - 70%

Course weight 10%

Course Assessment: Course Final Quiz – Graded (32 questions)

Passing threshold - 75%

Course weight 40%

Discussions: Week 4

NOTE: The lesson number refers to the course, module, and lesson. For example, lesson 1.2.3 refers to the first course, second module, third lesson.