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.