

Use Case Modeling - 2 Day

*PDU*s – 13

PMI's Certification Breakdown

PMP/PgMP - 13.00

PMI's Talent Triangle Breakdown

Technical - 13.00

Course Description: This hands-on, interactive two-day course will help participants examine the fundamentals of Use Case Modeling and its application for gathering requirements in the project life cycle. This course will present extensive, iterative Use Case Modeling methodology, including identification, development, and implementation. Students will participate in Use Case processes, examine the importance/impact of Use Cases, and gain the skills necessary to utilize Use Case Modeling effectively as a requirements gathering tool.

Method of teaching: *Students will use discussion, cases, and group activities to facilitate the course.*

Course Objectives:

Objective 1: Discuss the importance of gathering requirements in project management

- Define what constitutes a quality requirement and what purpose it serves
- Examine guiding principles for gathering quality requirements
- Examine the challenges of effective requirements gathering
- Examine classic mistakes made in gathering requirements
- Examine the difference between functional and non-functional requirements
- Discuss the “black box” mentality of users and its implications on requirements gathering
- Compare/Contrast software development project life cycle models
- Examine the “4+1” view of software architecture
- Compare/Contrast traditional requirements gathering techniques with Use Case Modeling

Objective 2: Examine the history and evolution of Use Case Modeling

- Examine the benefits of Use Case Modeling
- Define who benefits from Use Case Modeling
- List the goals of Use Cases
- Define Use Case Diagrams and their purpose
- Compare/Contrast Use Cases, Use Case Diagrams, and scenarios
- Define scenarios and paths as they relate to Use Cases and Use Case Diagrams

(Continued on next page)

Objective 3: Examine important components needed in gathering requirements including the mission, vision, values, SOW, risk analysis, prototypes, use cases, glossary, constraints, and business rules catalog

- Examine the Use Case Template and its components
- Define Use Case components including users, basic path, alternative path, exception path, extension points, triggers, assumptions, preconditions, post-conditions, and author

Objective 4: Examine how to use a Use Case Modeling Workshop in Use Case development

- Define the use of iterative and incremental approaches to Use Case Modeling
- Examine three types of iterations in Use Case Modeling (Façade, Filled, & Focused)
- Discuss the objective, steps, tools, and deliverables of the Façade Iteration
- Discuss the objective, steps, tools, and deliverables of the Filled Iteration
- Discuss the objective, steps, tools, and deliverables of the Focused Iteration
- Discuss the purpose of stereotypes (extend and include) in specializing Use Cases
- Define supporting artifacts to Use Cases such as packages, components, and class models
- Examine the benefits to requirements traceability using Use Case Modeling
- Compare/Contrast Use Cases and Test Cases
- Discuss how to manage Use Case influenced projects by requirements rather than tasks
- Examine the application of Use Cases to non-requirement gathering activities