Virtual Use Cases and Data Techniques Training

BRIEF DESCRIPTION 3 Sessions

The Use Cases and Data Techniques training focuses on how to capture requirements using the use case methodology and data techniques. The class will provide hands on training and practice writing and gathering detailed requirements using use cases, interface models, data flow diagrams, data modeling, domain object modeling, state diagram and screen specifications. The workshop is one third lecture and two thirds hands on exercises.

DESCRIPTION

The class focuses on industry standards and best practices for documenting the detailed requirements necessary for IT projects. The seminar focus is on:

- Understanding the different levels of requirements
- Characteristics and guidelines for writing effective use cases
- Writing skills and instructions for writing successful detailed requirements
- Practical exercises in context diagrams, use case diagrams, activity diagrams with swimlanes, high level use cases, domain object models, state diagram, detailed use cases, logical data models, data flow diagrams, screen mock-ups, screen specifications and report specifications
- Writing and critiquing use cases and system specifications using guidelines and checklists

The objectives of the seminar are to:

- Define best practices and standards for writing detailed specifications
- Provide practical exercises for using the use case methodology and data techniques
- Writing and critiquing detailed requirements using industry standards and best practice guidelines and checklists

SEMINAR CONTENT

Session 1 (1:00 – 5:00 pm Eastern Time)
Seminar Introduction

Overview of the Use Case Methodology with Data Techniques

- What business models are used and when?
- Overview of the techniques- use case diagram, conceptual data model, activity diagram with swimlanes, high level use case, domain object model, logical data model, detailed use case and data flows

Discovery Phase- Requirements Analysis

- Building the context diagram (Scoping the Data Requirements and Interfaces)

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  - Identifying functions, external objects and information views
  - Agendas, scripts and facilitation techniques
- Building the use case diagram
  - Identifying the end users and system interfaces
  - How to capture the dependencies between use cases (includes and extends)
  - Documentation for the Use Case Diagram
  - Agendas, scripts and facilitation techniques
- **Exercise- Creating the context diagram and use case diagram and documentation**
- Building the "To Be" activity diagrams using swimlanes
  - Documenting the end users and system interfaces
  - Identifying parallel activities and decision points
  - How to use the activity diagram to define business rules
  - Agendas, scripts and facilitation techniques
- **Exercise- Creating the "to be" activity diagram with swimlanes**

Session 2 (1:00 – 5:00 pm Eastern Time)

Discovery Phase- Requirements Analysis – High Level Use Cases

- Benefits of using the high level use case to identify requirements
- How to write the high level use case
  - Guidelines for the use case iterations
  - Templates and Quality Checklists
- Using the High Level Activity Diagram to identify the use cases to document
- How to use the Activity Diagram with swimlanes as an alternate requirements gathering approach to writing the use cases
- Agendas, scripts and facilitation techniques
- **Exercise- Writing the high level use case**
- Building the Logical Data Model
  - Basic data modeling terminology
  - Identifying and defining the entity types
  - Defining the attributes
  - Identifying the associations of the entity types
  - Agendas, scripts and facilitation techniques
- **Exercise- Identifying the entity types and building the logical data model**
- Matrices
  - Creating the process to entity type matrix
  - Agendas, scripts, templates and facilitation techniques
- **Exercise- building a process to entity type matrix**
- Logical Data Modeling Requirements Session
  - Requirements session techniques
    - Storyboarding
    - Business Models
    - Matrices
    - Tables
  - Agendas, scripts and templates for conducting a logical data modeling requirements session

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Session 3 (1:00 – 5:00 pm Eastern Time)

Discovery Phase- Requirements Analysis – High Level Use Cases

- How to create the domain object model
  - Identifying the objects, attributes, operations and multiplicity
  - Storyboarding the business model for the use case
- **Exercise- Creating the domain object model**
- How to create the state diagram using UML notation
  - Identifying the states and conditions for a business object
  - Storyboarding the state diagram for requirements gathering
- **Exercise- Creating the state diagram**
- Capturing detailed requirements using site maps and identifying inventories of screens, reports and system interfaces
- **Exercise- Create a site map**
- Iteration Plan – What is the thought process for building a plan?
  - Setting priorities
  - Creating the build plan

Discovery Phase- Detailed Requirements- Use Cases and Specifications

- How to write the detailed use case document
- How to use an activity diagram with swimlanes to define the detailed use case and show the system dependencies
- How to define the screen specifications using the screen mockups and data field descriptions
- Agendas, scripts, templates and facilitation techniques for detailed use cases and screen specifications focus groups
- **Exercise- writing the final use case, creating the activity diagram with swimlanes for the use case, storyboarding the screen specifications mockups and data field descriptions**

Discovery Phase- Detailed Requirements- Use Cases and Specifications

- Detailed use cases and screen specifications *(continued)*
- How to build the Data Flow Diagram (defining the detailed data requirements)
  - Identifying external objects, data stores and information views
  - Finding gaps and redundancies of data
  - Agendas, scripts, templates and facilitation techniques
- **Exercise-building the data flow diagrams using the context diagrams**
- Defining the Report Specifications
  - Key components of the report specifications requirements
  - Report Mock-ups
  - Report Specifications Template
- Simulation preparation time

Wrap up

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MATERIALS

Each seminar participant receives a Seminar Handbook with guidelines, checklists, agendas and scripts.

WHO SHOULD ATTEND

Those who will find this of value are the Business Managers, Business Analysts, Business Requirements Leads, Project Managers, Solutions Leads, Technical Leads, Quality Assurance, Business Subject Matter Experts (SMEs), Architects, Designers and Developers.

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