Advanced Business Analysis

Course ISI-1431 5 days, Instructor—led, Hands-on

Introduction

This 5-day instructor-led course is for business analysts looking to improve the way they elicit, analyze, document and communicate requirements.

For business analysts looking to improve the way they elicit, analyze, document and communicate requirements, there is no better training workshop. Using the proven case study model, participants explore two approaches to requirements modeling: the Unified Modeling Language (UML) and Information Engineering. Participants discover how modeling can help them make requirements decisions earlier in the system development life cycle, thus enhancing requirements quality and completeness. Data models, use cases, requirements traceability and prioritization are covered in depth. Designed to be prescriptive as well as descriptive, facilitators emphasize best practices through explanation and application. In short, participants discover what should be done, as well as how to do it and why

At Course Completion

At the end of this course, the student will be able to:

- Analyze and document both system functionality and data requirements
- Model requirements using Object Orientation, the Unified Modeling Language and Information Engineering concepts
- Create use cases and data models
- Ensure that the requirements are of a high quality
- Manage requirements throughout the system development lifecycle through traceability and prioritization

Prerequisites

Successful completion of the following courses or six months or more of practical business analysis experience. Familiarity with software systems analysis, design and implementation.

- Business Analysis Theory and Practice, Course ISI-1231
- Survival Skills for Analysts, Course ISI-1376
- Mastering the Requirements Process, Course ISI-1377

Course Outline

Module 1: Introduction

- Getting Started
- Workshop Objectives
- Workshop Agenda
- Value Added Modeling
- What is Business Analysis
- The System Development Life Cycle
- The Case Study
- Getting the Most from This Workshop
- Workshop Logistics
- Workshop Materials

Module 2: The Building Blocks

- Why Modeling Is Important
- Types of Models
- What is a System?
- Key Abstractions
- Requirements
- SMART Requirements
- Requirements Traceability
- Benefits

Module 3: Business Modeling

- Object Orientation
- Benefits of Object Orientation
- Syntax and Semantics
- The Perspectives and Architectures of UML
- Visualizing
- The Business Use-Case
- Generalization, Inheritance Relationship
- Assumptions
- Constraints

Module 4: Classes & Objects

- Elements of Object Orientation
- Class
- Class Diagram
- The Dictionary
- Objects
- Messages
- Sequence
- Sequence Diagram
- Best Practices of Object Orientation

Module 5: Behavioral Modeling

- Activity Diagram

Module 6: Use Cases

- The Use Case
- Why Use Cases?
- Actor-Action Modeling
- Use Case Diagram
- Relationships Between Use Cases
- Identifying Use Cases
- Textual Use Case
- Scenarios
- Use Case Template

Module 7: System Views

- The UML System Architecture Viewpoints
- The Five Perspectives
- The History of UML

Module 8: Conceptual Data Models

- The Principle of Abstraction
- Information Engineering
- Conceptual Models
- Entity Relationship Diagrams

Module 9: Logical Data Models

- Data Modeling Recap
- Drilling Down From the Conceptual Level
- The Three Models
- Conceptual Data Model
- Logical Data Model
- Physical Data Model
- Logical Data Modeling
- Databases
- Keys
- Data Model Views

Module 10: Normalization

- Data Model Quality
- Data Quality Is
- Normalization Tests
- Benefits of normalization
- Functional Dependency and Primary Keys
- First Normal Form
- Second Normal Form
- Third Normal Form
- Fourth Normal Form

- Clear Thinking About Data
- Quality Assurance
- Semantic Analysis

Module 11. Value Added Modeling

- Requirements Prioritization
- Requirements Re-use
- Isomorphism
- So Which Approach?