

(BA009) UML for the IT BA Boot Camp: Business Analysis Simulation Workshop covering the End-to-End Project Lifecycle (with UML 2)

Duration: 4 days

[An extended program – 5 days – is also available]

CDUs (Continuing Development Units): 28

BABOK Compliance: BABOK Release 2

Description: Follow a complete project through from end to end using all of the BA tools taught throughout the program. An excellent way to consolidate your knowledge as you apply what you've learned in “real time”, gaining practical experience over the course of the project. Covers business use-cases, system use-cases, workflow modeling, structural modeling (class diagrams), state machines, deriving test cases from use-cases and more.

All participants receive a copy of UML for the IT Business Analyst by Howard Podeswa. All workshops in public classes are developed on flipcharts; upon request, workshops during in-house training may be developed using a modeling tool (IBM Rational Rose or other).

Why Attend this Course?

Take this course to increase your effectiveness in employing Business Analysis techniques in the workplace:

- By following a project through from end-to-end, you'll reinforce knowledge gained throughout the program, learning exactly when to use each BA technique for maximum benefit.
- By working on all techniques over the same course, you'll experience how the techniques fit together; for example, how use-cases are tied to activity diagram and to class diagrams.
- For companies using Rational Rose for development: the Rose option of the course teaches BAs how to use Rose effectively for requirement modeling, resulting in a seamless transition to development.

What Makes this Course Stand Apart?

Well-chosen, realistic case study: The case study is carefully selected to be complex enough to exercise the entire full BA skill-set yet doable within the timeframe.

The Job Aids: Each trainee receives invaluable Job Aids for use back at the office, including a complete copy of the case study with an end-to-end Business Requirements Document, containing examples of all the tools and diagrams covered in the course.

Use-case centred approach: The trainee learns through practice how to employ a use-case centred approach to a project – effectively employing use-cases as a central link to the object model, decision tables, workflow modeling and other BA deliverables.

Experience: Our course is written and delivered by professionals with extensive practical experience in object and data modeling for business analysis.

Hands-on tool experience (when requested): For in-house training where the Rose option has been requested, trainees

gain hands-on experience using IBM Rational ROSE for Business Analysis.

Audience

- IT Business Analysts and their managers
- Systems Analysts and programmers interested in expanding their role into the business area.

Prerequisites

None

Class Format

Trainees work in teams, developing a case study over the course of a project. The instructor introduces each step by reviewing techniques required at the time. Working individually or in groups (as appropriate for the step), trainees perform BA activities and create deliverables, with the instructor acting as mentor. After each step is completed, the instructor takes up common issues that arose during the workshop. (Upon request: during workshops, trainees will use IBM Rational ROSE or other tools to create and link models and other BA documentation.)

Objectives

Upon completion of this course, you will be able to:

- Facilitate and act as analyst during project initiation (inception), making effective use of business use-cases and workflow modeling (activity diagrams, etc.) to define end-to-end business processes and consolidate the viewpoints of stakeholders.
- Create deliverables (Role Maps, Packages, etc.) early in the project to standardized how project-wide issues will be treated throughout the rest of the lifecycle.
- Break up a project effectively into business and system use-cases, employing advanced use-case features (include, extend, etc.) that minimize redundancies in the documentation.
- Create the business area structural model (class diagrams), describing system-wide business rules for essential business objects.
- Employ use-case analysis to discover and document business workflow rules.
- Create textual use-case documentation that clearly and effectively describes user requirements using state-of-the-art writing techniques and use-case templates.
- Ensure that business rules are uniformly expressed within the business requirements documentation by verifying use-case text against class diagrams.
- Facilitate a structured walkthrough to verify requirements with stakeholders.
- Link use-case documentation to the structural object model (class diagrams), state transition diagrams and other deliverables.
- Use decision tables and activity diagrams to enhance the value of use-case text.
- Define test cases making effective use of testing techniques such as boundary value analysis, use-case scenario testing, system tests and decision tables.
- Where requested: Use the Rational ROSE modeling tool to create class, use-case, activity and state-machine diagrams.

Content

- Enterprise Analysis: Analyzing the business context
 - > Analyzing end-to-end business processes with business use-cases
 - > Business use-case diagram
 - > Defining business actors
 - > Defining workers
 - > Defining end-to-end workflow

- Eliciting and documenting Systems Use-cases
 - > Facilitating use-case sessions
 - > Defining the users: Role Map
 - > Use-Case Diagrams
 - > Use-Case textual documentation
- Modeling workflow with activity diagrams
 - > Decisions, concurrent activities, object flows
- Analyzing key business objects with state-machine diagrams
 - > States
 - > Transitions
 - > Activities
 - > Events
 - > Guards
 - > Composite states with orthogonal substates
 - > Composite states with concurrent substates (parallel states)
- Defining business rules in the structural model:
 - > Facilitator tips for structural modeling
 - > Package diagrams
 - > Class Diagrams
 - Class
 - Generalization
 - Transient roles
 - Aggregation
 - Association
 - Association class
 - Multiplicity
 - > Quality Assurance
 - Deriving test cases from system use-cases
 - Selecting test data using Boundary Value Analysis
 - Testing Service Level (non-functional) Requirements with System Tests
 - Decision Tables
 - User Acceptance Testing
 - > What the developers do with the requirements
 - Sequence diagrams
 - Technical classes
- The role of modeling in business architecture

BABOK 2 Alignment

This course addresses the following BABOK knowledge areas and tasks:

Knowledge Area (KA)	Mapping to the Course
Business Analysis Planning and Monitoring	<p>The course provides guidance and hands-on experience in the following techniques used in the context of planning a business analysis approach: Process Models (used to define and document the business analysis approach) and Structured Walkthroughs (used as a means of validating a business analysis approach).</p> <p>The course provides guidance and experience in the following activities that support the task Conduct Stakeholder Analysis: modeling business stakeholders and their relationships to business processes (business use-cases) and modeling stakeholders (actors) who interact directly with an IT solution.</p> <p>The course also provides guidance in the planning of BA activities over an iterative lifecycle.</p>
Requirements Management and Communication	<p>The course provides guidance and experience maintaining requirements for reuse through the use of structural (data) modeling to centralize and reuse business rules and through advanced use-case techniques (extend, include, generalization) that promote reuse of the user requirements.</p>
Enterprise Analysis	<p>The course provides guidance and experience in the building of the following models used in the context of the Enterprise Architecture (an important input to assessing capability gaps): Class Diagrams; ERDs; process models (activity diagrams and business use-cases). The course also provides guidance on defining solution scope using behavioral and structural To-Be models.</p>
Requirements Analysis	<p>The course provides guidance in the following aspect of organizing requirements: mapping the behavioural and structural models to each other.</p> <p>The course provides extensive experience in specifying and modeling the behavioral requirements in the use-case model and in the definition of business concepts and relationships in the structural model. Techniques listed in the BABOK for specifying and modeling requirements are covered in this course as follows: Business Rules Analysis: (Decision Tables); Data Modeling: (structured approach using ERDs and UML approach using class diagrams); Process Modeling; Scenarios and Use-Cases; State Diagrams.</p> <p>The course provides guidance in verifying requirements through the identification and resolution of discrepancies between the behavioural model (use-cases) and the structural model.</p>