

Requirements Analysis Techniques

A CBAP® Preparation Course

Instructor-Led, On-Site Duration 2 days

Overview

This seminar is designed specifically to teach practitioners techniques that are recommended by the International Institute of Business Analysts (IIBA®). It builds the requisite knowledge and vocabulary based on the *Business Analysis Body of Knowledge*® to prepare you for ultimately taking and passing the Certified Business Analysis Professional® exam.

The techniques and topics presented herein target specifically knowledge areas **6 Requirements Analysis**. The course utilizes experiential instruction to present the technique and includes an in-depth review of the knowledge area as the final section to reinforce the concepts and terminology.

Target Audience

Business analysts
Business Systems Analysts
Requirements Engineers
Anyone wanting to work towards becoming a Certified Business Analysis Professional® (CBAP®)

Developed and presented by:



Requirements Solutions Group, LLC
3837 Northdale Blvd, Ste. 361
Tampa, FL 33624
We Build Business Analysts™

Telephone: **(813) 319-5851**
Fax: (813) 864-0131
E-mail: training@requirementsolutions.com
Web: www.requirementsolutions.com/

**Learning
Objectives**

Upon completion of this seminar, you will . . .

- Draw business process models
- Apply 5 improvement methods based on business process models
- Model the AS IS business process
- Document existing business processes
- Draw data flow, activity, swimlane, and sequence diagrams
- Choose the most appropriate technique to document the details of each process
- Draw data model (entity relationship) diagrams
- Create a data model from requirements
- Morph an existing data model into a future data model
- Document proposed user interaction in use cases and use case diagrams
- Structure basic use case information in a use case document
- Use use case diagrams as a scoping tool
- Document scenarios to discover use cases
- Detail the sequence of interaction steps for the most common situation
- Determine how to handle alternate and exception situations
- Write audience-focused use cases
- Apply 5 methods for discovering use cases
- Review and critique use case documents and use case diagrams
- Create and analyze activity diagrams to show use case flow of events
- Define the inputs and outputs of each task
- Demonstrate increased proficiency in the *BABOK*® terminology
- Paraphrase the goals and objectives of the knowledge area Requirements Analysis

1 Introduction to Process Modeling

The Problem with Process

Analysis of Business Systems Analysis
 The Fate Chart
 A Question File
 A Problem with Language
 Process Definition
 Benefits of High-Quality Models

2 Data Flow and Activity Diagrams

Creating Context Diagrams

System Modeling - A Short History
 Basic Process Modeling (The Symbols)
 Exercise: Identify the Errors on this Diagram
 The Simple Rigorous Business Process Model
 "Rigorous Business" Process Model Example
 Exercise: Order Entry Department Rigorous
 Business Model
 Exercise: Rigorous Model to Level 1 Process Model,
 step 1
 Top Level Functional (Process) Model
 Case Study Part 1

Creating Process Models

Leveled Process Models
 Second Level Process Model
 Exercise: Second Level Process Model
 Leveled Process Models (Review)
 Completely Leveled Process Models
 Case Study

Creating Activity Diagrams

Activity Diagramming Conventions
 Example of an Activity Diagram
 Exercise: Creating an Activity Diagram
 Introducing Swimlanes
 Example of a Swimlane Diagram
 Exercise: Modeling Swimlanes
 Concurrency and More
 From Data Flow to Object Flow
 Introducing Object Flow
 Exercise: Modeling Object Flow
 When To Use Swimlane Diagrams
 What's Wrong with this Diagram?

3 Data Modeling

Creating Data Models Intuitively

Data Model Diagrams
 Data Model Diagrams Alternative Graphic
 Conventions
 Data Model Diagrams Additional Information
 Exercise: Data Model Diagram for Project Resources
 Data Model Evolution
 Levels of Data Models
 Defining Entities
 Exercise: Definitions for Education Department Data
 For Your Answer
 Exercise: Data Modeling from Descriptions

Exercise: Identifying and Placing Attributes
 Simple Document for Invoicing System
 Exercise: Data Model from a Form
 Identifying Entities
 Exercise: New System Data Model from Scratch

Data Models as an Analysis Tool

Integrating Models (Conserving Data)
 Integrating Data Models
 Horizontal Balancing
 Data Design
 Sample Models
 Exercise: New Information Requirements
 Exercise: New User View Exercise
 Invoicing System Data Model
 Invoicing System Attributes
 Data Models vs. Databases
 Exercise: Summary

4 Defining Business Use Cases

Building Use Cases

Of Business Events and Use Cases
 Business Events
 Determining Event Responses
 Exercise: Identifying Business Events
 Exercise: Simple Event Response Table
 From Business Events to Use Cases
 The Role of Actors
 Naming Actors
 Finding Actors
 Exercise: Identifying Actors
 Inside the Use Case
 Discussion: The Use Case Value Equation
 Before the Beginning
 In the End
 Flow of Events
 Standard Path: Process Payment
 Exercise: Process Order Standard Path
 Paths in a Use Case
 Numbering Schemata {Good Practices}
 Exercise: Alternate and Exception Paths
 Identifying Common Elements
 Including Use Cases
 Use Case Extensions
 Extending Use Cases
 On Extensions and Inclusions
 Exercise: Pros and Cons of Inclusions and
 Extensions
 Inside the Use Case Checklist
 Discussion: What Measures Add Value to a Use
 Case?
 User Scenarios: A Bottom-Up Approach to Use Cases
 Use Case Scenario Structure: Donald Pays For
 Insurance
 The Advantage of Scenarios
 Exercise: Bottom-up Use Cases
 Discussion: Pros and Cons of Use Cases

5 Use Case Modeling Techniques

Building Diagrams of Use Cases

- Representing the Actor
- Use Case Diagram Symbols and Rules
- Use Case Diagram Conventions
- Exercise: Drawing a Use Case Diagram
- Advanced Use Case Diagrams
- Modeling Inclusion and Extensions

6 KA6 The Ins and Outs of Requirements Analysis

- Inputs for Requirements Analysis
- Outcomes of Requirements Analysis

7 KA6 Specific Activities of Requirements Analysis

- KA6.1 Requirements Prioritization
- KA6.2 Requirements Organization
- KA6.3 Requirements Modeling
- KA6.4 Defining Assumptions
- KA6.5 Requirements Verification
- KA6.6 Requirements Validation