Modeling Business and System Process Workflow Using UML Activity Diagrams

BA707 | Length: 1 day

Overview

Unified Modeling Language-based Activity Diagrams are an effective tool in modeling business workflow that incorporates manual and automated business processing.

Activity Diagrams provide measurable benefits for both technical solutions developers and business stakeholders for understanding the strengths and weaknesses of current business process regarding:

- Missing, redundant, badly sequenced, and low value steps.
- Interface points between automated systems and people.
- Integration points between automated systems.

In addition, the foundation iconography of Activity Diagrams is understandable by those with little or no training, making them extremely approachable and useful for business analysts working with non-technical business managers and end users.

This course provides you with the foundation level skills you will need to create effective requirements-based workflow diagrams.

Prerequisites

None.

Content Outline

Unit 1: Activity Diagrams and Business Process Workflow

- Transitioning from Use Cases to Activity Diagrams.
- Foundation Concepts for Process Workflow Modeling.
- Isolating the automated portion of the business solution.
- The Primary Control Structures: Sequence, decisions, loops, parallel/non-sequential processing.
- The principle of Elegance and why it is critical to the communication power of workflow modeling.
Unit 2: Basic Iconography and Usage

- Process scoping with the activity frame.
- Identifying actors and hand-off points with activity partitions (swimlanes).
- Core components: Actions, activity nodes, flows, object values.
- Starting and stopping: Activity initial nodes, activity final nodes, flow final nodes.
- Modeling conditional processing with guards.
- Modeling object flows and integration with task step activity flow.
- Indicating state change.

Unit 3: Advanced Iconography and Usage

- Indicating sub processes and repeated steps with child diagrams.
- Performing set operations with expansion regions.
- External and Internal Events.
- Messages and signals.
- Events: Call events, time and change events, sending and receiving events.

Unit 4: Optimization

- When to re-think your Activity Diagram: Common syntactical and usability violations.
- Using the principles and practices of elegance to optimize:
  - Communication and validation with users.
  - Business process efficiency and efficacy.
  - Communication and design transition with software developers.