



**DIGILEAF INC.**

*Leading Excellence Among Fellows*

## Course Outline

### Enterprise Architecture Learning Track

## Domain Model: Modeling Generalization

This course covers the discussions and applications of UML generalization and specialization. Generalization and specialization are fundamental concepts in domain modeling that support an economy of expression. This course shows how conceptual class hierarchies are often the basis of inspiration for solution class hierarchies that exploit inheritance and reduce duplication of solutions.

### Training Objectives

In groups, participants will be able to create class diagrams containing generalizations and specializations.

Individually, the participants will be able to:

1. Create generalization-specialization hierarchies.
2. Identify when showing a subclass is worthwhile.
3. Apply the "100%" and "Is-a" tests to validate subclasses.

### Target Audience

- Business Architects
- Enterprise Architects
- Anyone who will be involved in creating/maintaining data architecture.

### Learning Methodologies

- Interactive Lecture/Demonstration
- Workshops

### Topics

- I. Introduction
- II. New Concepts for the Domain Model
- III. Concepts Category List
- IV. Noun Phrase Identification from the Use Cases
- V. Generalization Description
- VI. Defining Conceptual Superclasses and Subclasses
- VII. Generalization and Conceptual Class Definition
- VIII. Generalization and Class Sets
- IX. Conceptual Subclass Definition Conformance
- X. Conceptual Subclass Set Conformance
- XI. When to Define a Conceptual Subclass
- XII. Motivations to Partition a Conceptual Class into Subclasses
- XIII. When to Define a Conceptual Superclass
- XIV. Abstract Conceptual Classes
- XV. Abstract Class Notation in the UML
- XVI. Modeling Changing States
- XVII. Class Hierarchies and Inheritance in Software

**Duration** 3 day(s)