

Introduction to Rational Rose

CDT724

This course is an introduction to the use of Rational Rose as a tool for recording object-oriented project designs. It also includes Rose's capabilities for generating skeleton code from UML design diagrams and reverse-engineering from code to design diagrams.

Audience

- Analysts and developers who will be using Rational Rose as a tool for designing projects, or coding from UML diagrams in Rational Rose.

Prerequisites

- Students must be familiar with [object-oriented terms and concepts](#).
- In addition, the class will be more beneficial to those who already have some hands-on experience with [use cases](#) and object-oriented programs.

Course Length

- One day

Learning Objectives

- Use Cases
- Classes
- Relationships
- Object Interaction
- Attributes and Methods
- Inheritance
- Architecture
- Code Generation

Teaching Methods

- Lecture
- Written exercises
- Integrated case studies

Course Outline

SG5

Introduction

- Overview of Rational Rose
- Views
- Diagram Types

Use Cases

- Use Case Diagrams
- Actors
- Documentation

Classes

- Classes
- Stereotypes
- Class Specifications
- Documentation
- Packages

Relationships

- Associations
- Aggregations
- Names and Roles
- Multiplicity

Object Interaction

- Defining Scenarios
- Sequence Diagrams
- Objects
- Collaboration Diagrams
- Documentation with Notes

Attributes and Methods

- Documenting Attributes
- Methods and Parameters

Inheritance

- Class Wizards
- Class Diagrams
- Inheritance Relationships

Architecture

- Packages
- Dependencies
- Subsystems
- Components
- Interfaces
- Deployment

Code Generation

- Generating Code
- Reverse Engineering