CDT 725 Rational Unified Process
3 Days

Course Description

This course introduced students to the RUP (Rational Unified Process), as a philosophy, a process, and a product. They will learn best practices in software engineering, as embodied in the RUP, and how the apply them.

Students learn the phases of a RUP project, the activities which take place in each phase, and how various job roles fit into the overall project. The basic principle of iterative development is covered, and students learn to identify and write use cases. Students will have an opportunity to apply RUP in a simulated project.

Students will work with IBM's RUP product, and learn how it can be customized for different types of projects and different organizations. The course also covers some of the common issues that should be considered when converting to the use of RUP from some other project process.

Audience

A wide variety of job roles can benefit from this course, including project managers or leads, analysts, designers, architects, developers, testers, and anyone else who will be involved in a software project.

Prerequisites

Students do not need to have any prior knowledge of or experience with the Rational Unified Process. However, a general knowledge, from course work or practical experience, of the software development process will be helpful.

Topics

Module 1

Introduction
RUP as an Approach
RUP as a Process.
RUP as a Product.
Exercise

Module 2

The Guiding Principles of the RUP
The RUP vs the Waterfall
The Iterative Approach
Exercise

Module 3

Introduction to Use Cases
Actors
Diagrams
Base Use Case Descriptions
Alternatives
Instance Scenarios
Other Requirements
Exercise

Module 4

Types of Project Configurations
Example of a Small Software Project

Module 5

The RUP Project Lifecycle
Inception Phase
Elaboration Phase
Construction Phase
Transition Phase
Exercise

Module 6

Configuring the RUP
Customizing the RUP
Exercise

Module 6

Roles in a RUP Project
Project Manager
Analyst
Architect
Developer
Tester

Module 7

Adopting the Rational Unified Process
A Program for Moderate Change
A Program for Major Change
Planning an Iterative Project
Project Plans vs Iteration Plans
Estimating

Module 8

Common Mistakes and How to Avoid Them
Adopting the RUP
Managing Iterative Development
Analysis, Architecture, Design, Implementation, and Testing
Transitioning to the RUP

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