

JAV130 : Eclipse Introduction

Code : JAV130 **Duration :** 1 day

Category : Tooling

Audience :

This course is intended for developers who want to learn how to use the Eclipse IDE for software development.

Prerequisites :

Basic knowledge of and experience with programming is required to participate in this course.

Realization :

The theory is treated on the basis of presentation slides and is interspersed with exercises. Demo's are used to clarify the concepts further. The course material is in English.



Eclipse Introduction



Contents :

In the course Eclipse Introduction participants learn how to work with the popular Eclipse IDE for application development. Eclipse is a widely used IDE (Integrated Development Environment) for application development. Often Eclipse is used to develop Java applications but there are also plugins available for developing PHP and C++ applications. The role of views and perspectives in Eclipse is discussed and participants will learn how to configure Eclipse for a range of different tasks, such as using a specific Java SDK or Java version and using a specific application server. The creation of various Eclipse projects will be discussed and participants will learn how to find their way through the multitude of settings and configuration options. Attention is also paid to debugging applications in the Eclipse Debug perspective. Furthermore the extension of Eclipse through the installation of Eclipse Plugins is part of the subject matter. Finally the integration with JUnit and the creation of JUnit tests is discussed.

Module 1 : Eclipse Intro

- Eclipse Project Aims
- Eclipse Overview
- Eclipse Origins
- Early History of Eclipse
- Eclipse as Java IDE
- Eclipse as IDE Framework
- Eclipse as Tools Framework
- Top Level Projects
- Eclipse Projects
- Eclipse Open Source Community
- Eclipse Eco System
- Eclipse Foundation

Module 2 : Eclipse IDE

- About IDE's
- Workspace Component
- Standard Widget Toolkit
- Eclipse on Windows XP
- Eclipse on MacOS
- Workbench Terminology
- Editors
- Views
- Perspectives
- Debug Component
- Ant Component
- Help Component
- Java Development Tools
- Java Perspective
- Java Editor
- Refactoring
- Eclipse Java Compiler
- Eclipse Java Debugger

Module 3 : Eclipse Plugin Architecture

- Eclipse Layering
- Eclipse Plugin Architecture
- Eclipse Plugins
- Plugin Manifest
- Eclipse Plugin Architecture
- Platform Architecture
- Plugin Activation
- Plugin Fragments
- Plugin Install
- Eclipse and OSGI
- Import-Package
- Require-Bundle

Module 4 : Eclipse JUnit

- Test Driven Development
- Unit Testing
- What is and why JUnit?
- JUnit Features
- JUnit Based Test Code
- JUnit mechanics
- Simple Test
- Simple Testcase
- Assert Statements
- Fixtures
- Test Suites
- Test Runner
- JUnit classes