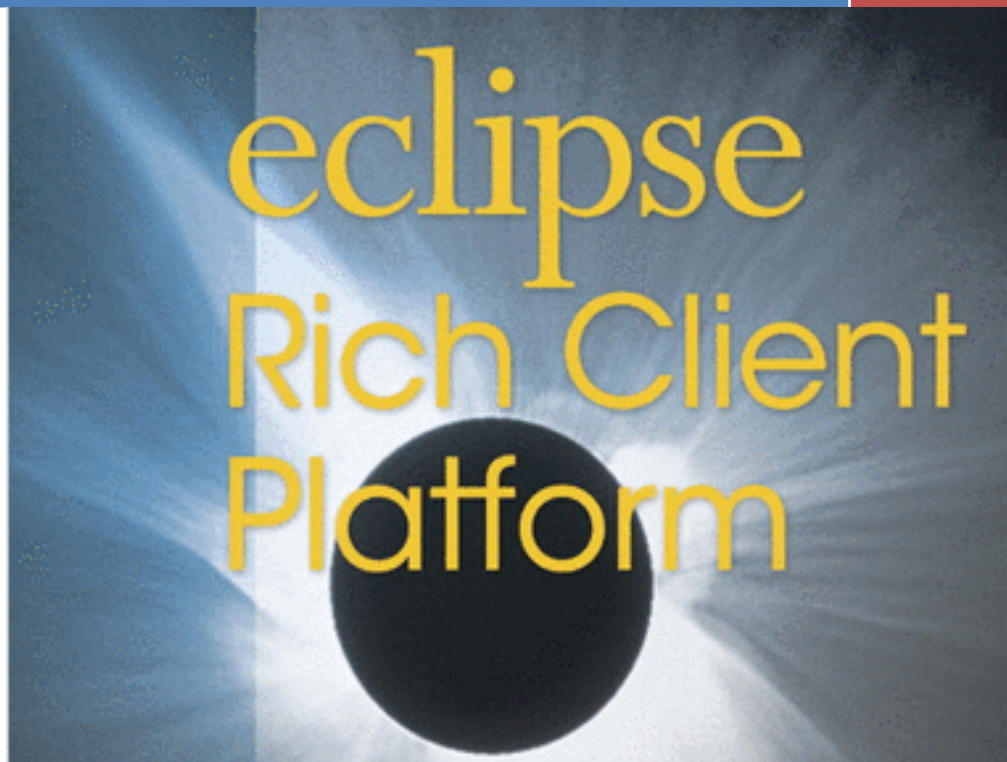


RCP COURSE CONTENT



Eclipse RCP is a platform for building and deploying rich client applications. It includes Equinox, a component framework based on the OSGi standard, the ability to deploy native GUI applications to a variety of desktop operating systems, such as Windows, Linux and Mac OSX and an integrated update mechanism for deploying desktop applications from a central server.

Annamalai C, ANCIT Consulting



ECLIPSE PLUGIN/RCP DEVELOPMENT

Training Program

Target Audience

This course is designed for developers who want to develop commercial applications for Eclipse or want to extend Eclipse or Eclipse-based products to meet specific requirements.

Goal of this Training

- Command of the basic development cycle in plugin development (PDE, Unit testing of plugins, Deployment).
- Use of APIs for the development of GUIs and for the integration of tools.
- Understanding of the Eclipse architecture and orientation within the individual subsystems of the platform.
- Understanding of the Plugin development best practices.
- To be familiar with all relevant concepts and features of the Eclipse's Rich Client Platform (RCP) and to be able to apply this knowledge to your GUI development needs.

Prerequisites

- Strong knowledge of Java and a basic knowledge of XML.
- Strong knowledge of object-oriented programming.
- Understanding of design patterns, refactoring, and unit testing will be valuable but is not required.

Duration and Additional Information

- It is a 4 day program and extends upto 8hrs each.
- The format is 80% Lab, 20% Theory.
- Max 15Nos. per Class.

For details of the Course please refer to the attached Annexure.

Annexure – Table of Contents for EPRD Training

Day 1

Session 1

1. Introduction to Eclipse (Theory)

- What is Eclipse? – An introduction
- Eclipse as an IDE. For.e.g. JDT
- Eclipse as a Tool Development Framework. For e.g. PDE
- Eclipse as an Application Development Framework. For e.g. RCP
- Building Blocks of Eclipse Platform – Workbench, Workspace, Help, Team
- Who is On – BOARD ??

2. Eclipse Architecture (Theory)

- Basic Architecture
- Platform Runtime
- Extension Points
- Plug-ins (plugin.xml, manifest.xml)
- Eclipse API

3. Plugin Development (Theory + Practical)

- Extending Workbench, Commonly used Extension Points
- Plugin Development Environment & Plugin Editor
- Developing, Installing and Running a Plugin
- Plugin Registry

Session 2

4. Extending Perspective (Practical)

- Introduction to Perspective
- Create our own Perspective, and add Views, Actions to the Perspective
- Use Perspective Extensions

5. Workspace & Resources

- Introduction to Workspace Concept
- Introduction to IResource
- Working with Resources in Eclipse

6. Extending Views (Practical)

- Introduction to Views.
- Extending a View.
- Use of JFace Viewer to display Data. (Sorting and Filtering)
- Including PopUp Menu on the View.
- Attaching a Local Toolbar to the View.

Day 2
Session 1

7. JFace Wizards & Dialogs (Practical)

- Using the Message Dialog from Eclipse
- Extending Wizards (New, Import and Export)
- Introduction to Workspace Job
- Developing a Wizard to update our View

8. Extending Actions, PopUp Menus (Practical)

- Extending Actions (ActionSet, ViewAction, EditorAction)
- Extending PopupMenus (Object Contribution, ViewerContribution)

Session 2

9. Activating Key Binding (Practical)

- Creating Command
- Creating Binding
- Associating it to existing ActionSet

10. Creating Properties Page (Practical)

- Extending org.eclipse.ui.propertyPage

Day 3
Section 1

11. Creating Preference Page (Practical)

- Extending org.eclipse.ui.preferencePages
- Extending org.eclipse.core.runtime.preferences

12. Contributing to Help Plugin (Practical)

- Introduction to Help System in Eclipse
- Contributing Help to the Help System

Section 2

13. Extending Editors (Practical)

- Text Editors (Optional)
 - Syntax Coloring
 - Content Assistant
 - Text Hover
 - Annotation Hover
 - Double Click Strategy
- MultiPage Form Editors – Rich UI Development Client
 - Using FormToolkit
 - Creating Sections,
 - HyperLink, Expandable Composites

Day 4 – Full Day on Bundling Plugins and Building Rich Client Platform

14. Bundling Eclipse Plugin

- What is build.properties ?
- Steps to configurate Manifest Editor before Export.

15. Deploying Plugins

- Deploying as Plugins in Plugin Directory
- Deploying as EclipseExtensions

16. Creating Extension Points

17. Introduction to RCP

- What is an RCP?
- What is required to make an RCP
- LifeCycle of a RCP.

18. Creating an RCP

- Creating a Hello World RCP
- Contributing to Menu & Action Bar
- Adding Views and Perspectives (Created in the previous session)
- Creating a Product Configuration File.
- Launching & Testing an Application
- Adding a Splash Screen
- Adding a Help System (Created in the previous session)
- Branding the Product with Windows Icon, Launcher Name.
- Adding an About Us Page.