# Eclipse RCP and Plug-in development

### **Background**

Most of us know **Eclipse** as an integrated development environment (IDE) for Java. On the flip side, there is lot more to Eclipse than "just an IDE" – it is a collection of core frameworks and services that are required to support a comprehensive tool integration platform, it is a flexible environment to experiment with new computer languages or extensions to existing languages, a platform to easily build and deliverintegration tools and a great place to learn and explore.

#### Goals

Introduce Eclipse as a platform for developing Plug-ins and Rich Client Application's.

#### **Audience**

- Java developers looking to use of Eclipse for developing general GUI base applications
- Software architects interested in developing business applications
- Eclipse plug-in developers wanting to optimize their skills

## **Prerequisites**

- Experience of developing applications using Java
- Experience using the Eclipse IDE is desirable

#### More info

Course duration : 2 days

• Course structure : Instructor led with at-least 80% hands-on labs and tutorials

• Equipment : Participants supply their own computer with the latest Eclipse

#### Day 01 (First half)

- Introduction to Eclipse Rich Client Platform (RCP)
  - History, Benefits and Examples
  - o Architecture of RCP Application
  - o Plug-in based modularization
- Applications and Workbench
  - o The workbench
  - o Windowing: Window, Menu, Page, Perspective, View, Editor
- Hello World RCP
  - Creating your first RCP application
  - Launching the application
  - Workbench advisor classes

### Day 01 (Second half)

- Introduction to SWT
  - SWT widgets/Controls
  - Basic structure of SWT applications
- Hello World SWT application

- Basic structure of SWT applications
- SWT Layouts
- Using SWT Layout managers
- JFace UI framework
  - JFace viewers
    - Introduction to Structured viewers
    - Using JFace Tree Viewer
    - Content and Label providers
    - Tables and JFace Table Viewer

# Day 02 (First half)

- Views and Perspectives
  - Introduction to Extension points
  - o Adding Views
  - o Adding JFace Viewers to the Views
  - Adding Perspectives
  - o Arranging views within perspectives
- Action and Commands
  - o Contributing Menus, Toolbar actions, Popup menu
  - Command framework
    - Contributing Menus, Toolbar actions, Popup menu
    - Conditional Enablement and visibility
    - Reusing existing Workbench commands

## Day 02 (Second half)

- JFace Dialogs and Wizards
  - Creating JFace Dialogs
  - Reusing Dialogs
  - Contributing Wizards
    - Implementing Wizard and Wizard pages
    - Customizing a Wizard
    - Defining Wizard extension
- Progress monitors for long running applications
- Branding and packaging
  - Customizing your application with product branding
  - Packaging an application with features
  - o Deploying your RCP application

Trainer: Neeraj Bhusare (8+ years of experience in developing Eclipse based applications)

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Clients: Nokia, Robert Bosch, TCS, Tata Elxsi, KPIT, Golden Source

Also conducted Public workshops in Pune, Bangalore