# ECLIPSE

INTRODUCTION
*ECLIPSE IDE*

## LEARNING OBJECTIVES

At the end of this lesson, you will be able to:

○ Understand the importance of IDE

○ Explore the features of Eclipse IDE

○ Configure Eclipse IDE for Java Development

## INTEGRATED DEVELOPMENT ENVIRONMENT

> Writing and Testing code using a text editor and console can be time consuming

> Integrated Development Environment (IDE)

- Editing environments with tools to help programmers write and test code quickly and efficiently

- Make development easier

- Increases productivity of programmers

- Assist with developing, testing and debugging

> Popular IDEs for Java

> Eclipse

4

## ECLIPSE

- Eclipse is an IDE for developing applications using the Java programming language and other programming languages such as C/C++, Python etc.
- Eclipse is open source and freely available to download
- Plugins
  - Eclipse IDE can be extended with additional software components called plugins
    - CheckStyle plugin can be added to do Static Analysis of Java Code
    - m2eclipse plugin can be added to integrate Maven with Eclipse
- Workspace
  - Physical location where the projects, source files, images and other artifact's

- Project
  All the source code, associated information, settings, and preferences are in a given project.
- Plug-ins
 In addition to the basic configuration, user specific tools / functions can be added via plug-ins.
      Examples include tools for:
      Static code analysis
      File Management / Version Control
      Testing
- Perspective
  Perspectives provide window with  quick access to tools specific to the type of work being performed.
    - The Java perspective stand alone application development
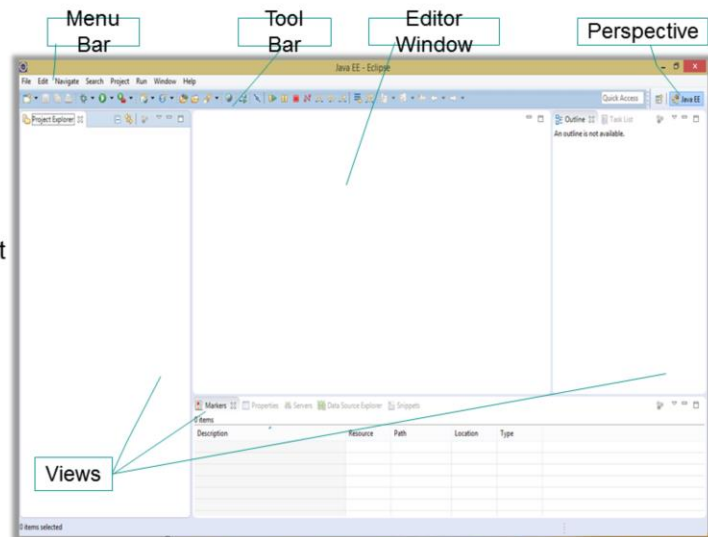    - The Java EE perspective supports web application development

# WORKBENCH LAYOUT

Workbench consists of editor windows and other set of windows called as views

**Perspective**
- Defines the initial set and layout of views in the Workbench window

- provides a set of functionality aimed at accomplishing a specific type of task, or working with a specific type of resource

   - Use "Java" perspective for building Stand alone java applications

Menu Bar

Tool Bar

Editor Window

Perspective

Views

## USEFUL SHORTCUTS IN ECLIPSE EDITOR

- ➤ Ctrl + space : template proposals / context help
- ➤ Ctrl + I : Correct indention of selected text or of current line
- ➤ Ctrl + / : Toggle Single Line Comment
- ➤ Ctrl + Shift + / : Add Block Comment around selection
- ➤ Ctrl + Shift + \ : Remove Block Comment around selection
- ➤ Type sysout and Ctrl + space : System.out.println
- ➤ Type main and Ctrl + space : main method
  - • **Refer to the word document for the configuration of jdk and creating java project**

## References

➢ Refer following demo videos on EduNxt
  • M1L2L1_Using_Eclipse_IDE - Demo

**SUMMARY**
*ECLIPSE IDE*

manipalglobal
education services

In this lesson, you've learned to:

○ Appreciate the importance of IDE
○ Use Eclipse IDE for Java programming