

CSSE2002/7023 Eclipse Tutorial

Eclipse is a powerful IDE (Integrated Development Environment) that can be used for the development of Java programs. This tutorial is not intended as a comprehensive guide to the use of Eclipse. Rather it explains those features of Eclipse that are necessary to complete the practical problems and assignments in CSSE2002. You are not required to use Eclipse and may choose to use another IDE or compile and run your programs using a command-line environment such as DOS or Unix/Linux.

Getting started

The first time you run Eclipse you will be asked to choose a *workspace*. This is a folder in which you store the files associated with the Java programs you develop. You can change your workspace at a later time by selecting **Switch Workspace** from the **File** menu.

Start up Eclipse and exit the Welcome window. From the **Window** menu choose **Open Perspective > Java**. You will be presented with a default window layout, or *perspective*, for the development of Java programs. Each of the windows has a title beside which is a cross. Clicking on the cross removes the window from the perspective. To add a window that has been removed, select **Show View** from the **Window** menu followed by the type of window, or *view*, you want. Windows can also be resized by clicking on their borders and dragging. To return to the default layout, select **Reset Perspective** from the **Window** menu.

Creating a new project

To start developing a new Java program you need to create a *project*. From the **File** menu select **New > Project**. Select the Java Project wizard by clicking on it, and then clicking on **Next >**. Type a name for your project and then click on **Finish**. A new project which uses the JRE (Java Runtime Environment) System Library will appear in the **Package Explorer** window.

Adding classes and other files to a project

To add a new Java class to a project, select **New > Class** from the **File** menu. Select a project and type a name for your class in the wizard that appears and then click on **Finish**. Other files can be similarly added by selecting **New > File** from the **File** menu.

To import existing Java classes or other files, click on **Import** from the **File** menu. Select **File System** as the import source in the wizard that appears and then click on **Next >**. Then choose the folder and the files from that folder you wish to import. Finally, choose the project folder to which you wish to import the files and click on **Finish**.

Editing and running Java programs

You can open files for editing by double clicking on them in the **Package Explorer** window. Eclipse will continuously compile your `.java` files as you edit. Compile errors are indicated by underlined code and crosses in the left-hand margin. Move the cursor above the underlined code or cross to display the error.

To run a Java program opened in a currently active window, select **Run > Java Application** from the **Run** menu. Alternatively, select **Run...** from the **Run** menu and choose the file to run. Selecting **Run Last Launched** from the **Run** menu will run the last program that you have run again.