

Introduction to Java Programming

Create a folder (such as: MyJavaCode) on your Z: drive as the Java working folder you will use for all Java programming. We call this folder "Your Java Folder" in the rest of this document.

The following are some external libraries and files, please download them from the portal and save in a folder on your Z: drive.

1. CS Library
2. Image files (in a zip file).
3. Some sample Java programs.

Basic Operation With Java from A Terminal Window

1. Assume that the above files have been saved in my Java Folder: Z:\MyJavaCode
2. Set environment variable "classpath" so that the computer knows where to find the library files needed for this project. (You don't need do this if the project does not use any external libraries).
 1. Start → My Computer → System Tasks → View system information → Advanced → Environment Variables → User variables → New
 2. Variable name: **classpath** variable value: **.;Z:\MyJavaCode\CSLib.jar**
3. Open a terminal window: Start → Run "cmd"
4. In the terminal window, type "cd Z:\MyJavaCode", this leads you to the location where the java code is stored
5. Type "javac -implicit:none HitWall.java"
6. Type "java HitWall"

Working with Java using Eclipse

Eclipse Program is an Integrated Development Environment (IDE) that helps you do programming in Java.

1. Open Eclipse Program
2. You are asked to choose a workspace – select Your Java Folder as the workspace
3. Create a new project by: File → New → Project (Choose "Java Project")
4. A new folder with the same name as this project is created inside Your Java Folder. This is done automatically by Eclipse when you create a new project.
5. Unzip the image files and put all images inside this Project Folder.
6. Set up the link to the external library file we need:
 - a. Select the new project you just created
 - b. Project → Properties → Java Build Path
 - c. Select "Libraries"

- d. Select "Add External JARs"
 - e. Choose the CSLib.jar file you have saved on your computer.
 - f. Click on "OK"
7. Create a new Class "HitWall"
 - a. Select the new project you have created.
 - b. File → New → Class
 - c. Enter Class Name as "HitWall"
 - d. In the Editor window, type / copy the contend from the sample code
 - e. Save the file
 8. Compile: Select the project, Project → Build Project
 9. Run / Execute "HitWall": Select the "HitWall" Class, Right Click on it, choose "Run".

Application Programming Interface (API) for CSLib is available here:

http://www.cis.umassd.edu/~x2zhang/courses/CIS160/CSLib_API/