



# CS260 Intro to Java & Android

## 01.JDK Intro

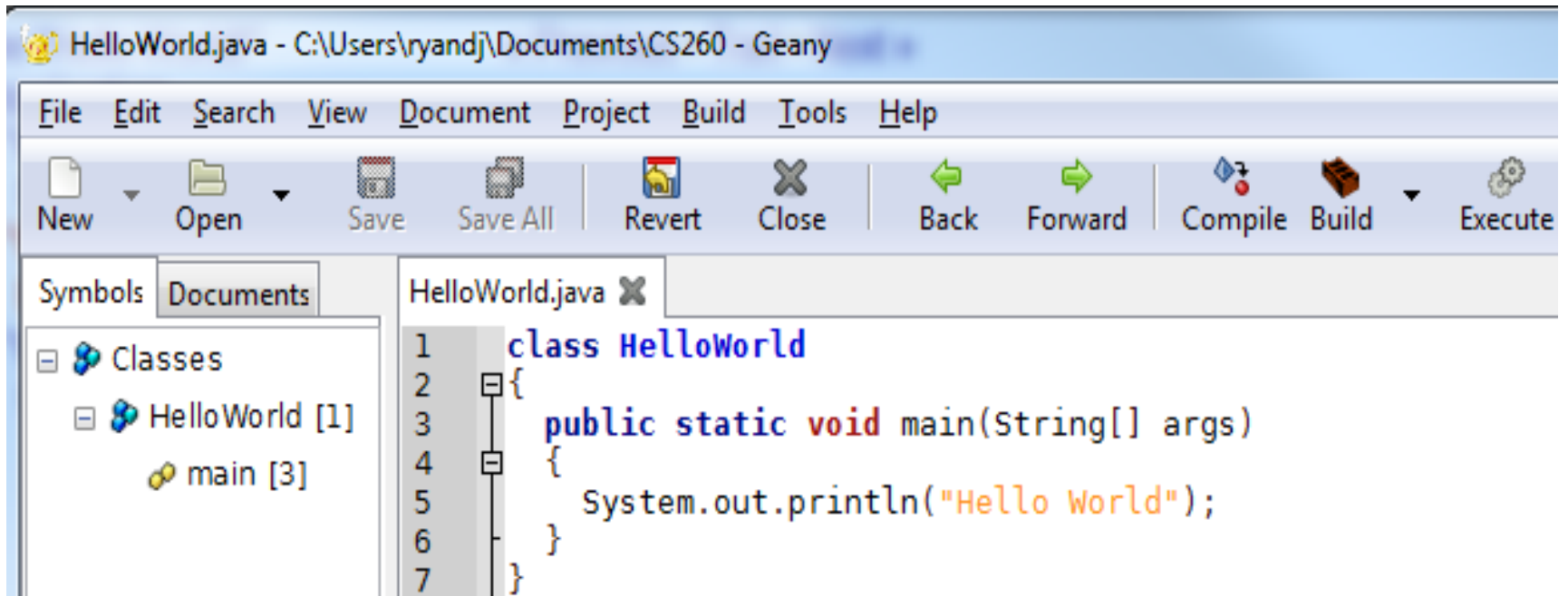
Fall 2011

# Java Tutorials

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- The main source of Java documentation will be the Java Tutorials
  - <http://download.oracle.com/javase/tutorial/>
- Read Trails Covering the Basics
  - Getting Started
  - Learning the Java Language
  - Essential Java Classes
  - Collections

# Hello World Using Geany



The screenshot shows the Geany IDE interface. The title bar reads "HelloWorld.java - C:\Users\ryandj\Documents\CS260 - Geany". The menu bar includes File, Edit, Search, View, Document, Project, Build, Tools, and Help. The toolbar contains icons for New, Open, Save, Save All, Revert, Close, Back, Forward, Compile, Build, and Execute. The left sidebar shows a "Symbols" pane with a "Documents" tab, displaying a tree view of classes: "Classes" containing "HelloWorld [1]" which contains "main [3]". The main editor window shows the following Java code:

```
1 class HelloWorld
2 {
3     public static void main(String[] args)
4     {
5         System.out.println("Hello World");
6     }
7 }
```

# Java Development Environment

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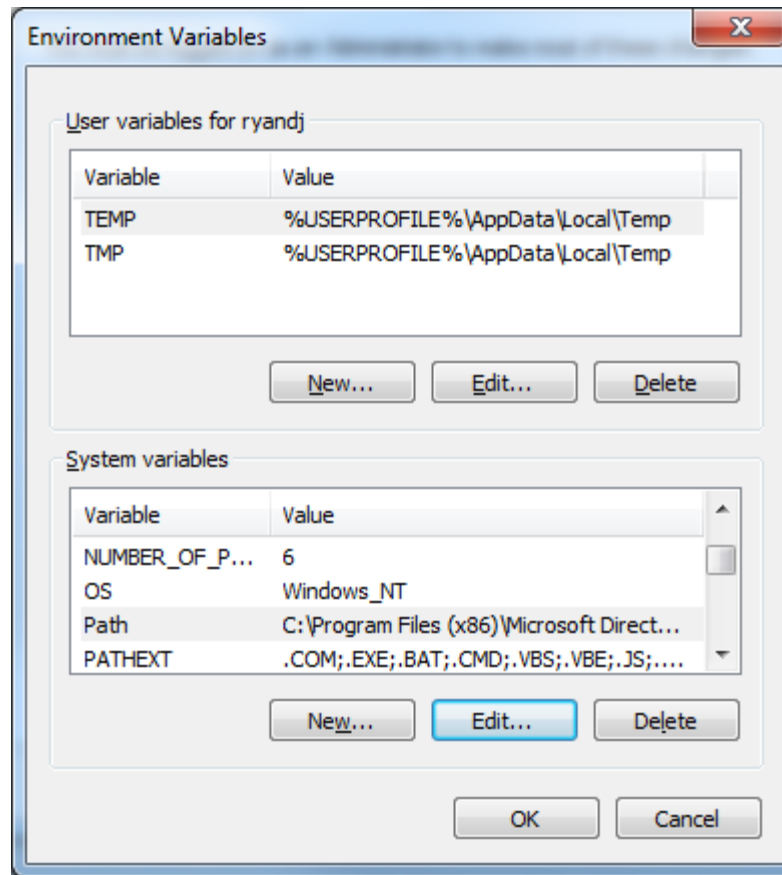
- JRE (Java Runtime Environment)
- JDK (Java Development Kit)
- Text Editor (e.g. NotePad or Geany)
  
- JRE & JDK can be found at <http://www.oracle.com/technetwork/java/javase/downloads/index.html>

# Java Development Environment

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- After installing the JRE & JDK, add the path of the compiler (javac) & interpreter (java) to your PATH
- Control Panel->System & Security->Change Settings->Advanced->Environment Variables

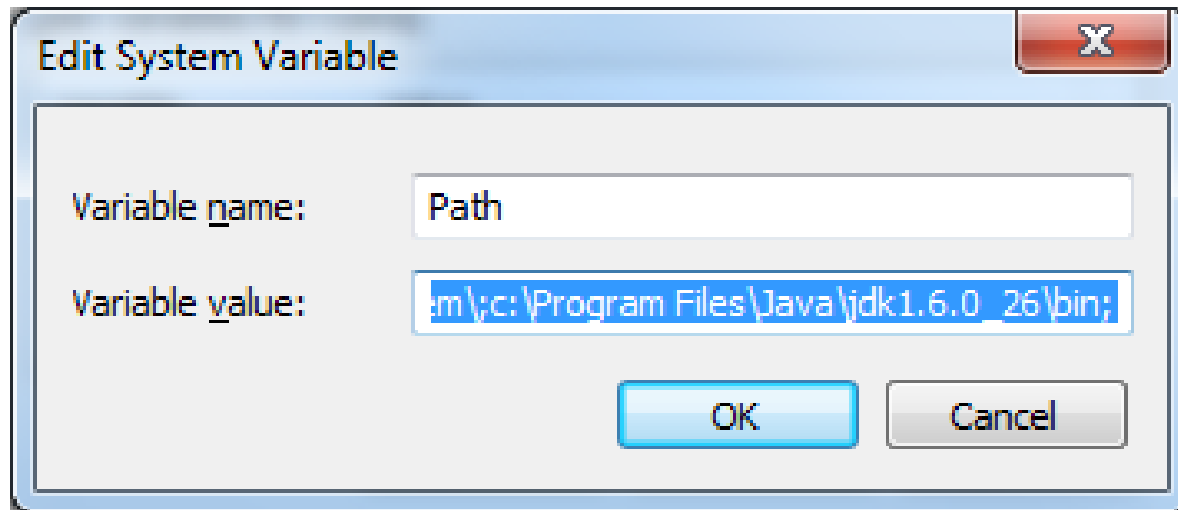
# Environment Variables



# PATH Variable

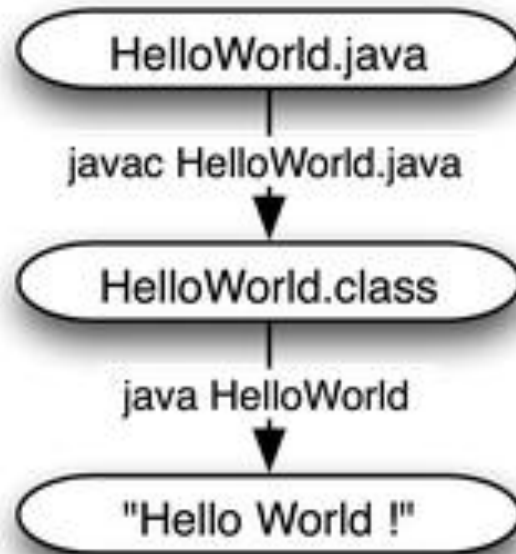
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- 64-bit version is Program Files
- 32-bit version is Program Files (x86)



# Compile & Execute HelloWorld

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# HelloWorld

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- Problem #1:
  - Using Geany type in the HelloWorld program
  - Select Compile
  - Select Execute
- Problem #2:
  - Change Hello World to Hello Yourname
  - Open a command window
  - Change directory to HelloWorld.java
  - Type `javac HelloWorld.java`
  - Type `java HelloWorld`

# Rational

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- Let's take a look at the Java coding standards
- Problem #3
  - Grab the two files Rational.java and RationalDriver.java from the CS260-01 Public folder on Turing
  - Compile Rational.java
  - Compile and execute RationalDriver.java
  - Let's go over the Java code
  - Discuss Javadoc tags
  - You can create Java Documentation for both classes using the Javadoc tool