

CS/IS 160 – Programming and Problem Solving II

Lab Exercises #1, Week 2 - *Eclipse and Java Quick Start*

In this lab we will explore Eclipse IDE tools for Java programming and write a couple of Java programs. Before we do that, let's make sure we have a functioning Java environment.

JRE - Java Runtime Environment - Must be installed for Java programs to run

JDK - Java Development Kit - Must be installed in order to create Java apps (JDK includes JRE)

Eclipse - a standard IDE for Java programming, extremely handy.

You will need to install a JDK on your laptops, while the Lab PCs already have a JDK installed. For our class, it is fine to use any JDK version 6 and above. The current version of Java JDK is Java SE 8 (version 8, revision 40).

When programming, it is good to have JDK documentation handy, here is the current link:

Java API Documentation: <http://docs.oracle.com/javase/8/docs/api/>

Tasks for this lab:

- If you have your own laptop, install Java and Eclipse (use Google to find distributions)
- Do the following exercises in separate projects:

Exercise 1. Positive or negative or zero?

Write a program that will prompt the user to enter an integer number N. The program determines if the entered number is positive, negative, or zero. The user should then be given an answer in the form of "The integer N is positive/negative/zero."

Exercise 2. The "FizzBuzz" problem.

Write a program that prints the numbers from 1 to 100. However, for multiples of three the program prints "Fizz" instead of the number, and for the multiples of five it prints "Buzz". For numbers that are multiples of both three and five it should print "FizzBuzz".