Primitive Data Types

After learning about variable initialization and assignment, you should be aware that data types are serious business. They can determine the success or failure of your project. Therefore, you should know them extremely well. This document should serve as a quick reference guide for the data types we will be using most often in this class. Research each of the terms below and write their definitions in the boxes below

int :

Int is a data type that is represented by integers in code and will not recognize numbers that contain decimals within them.

Double:

Double is a data type that is represented by real numbers in code. They are particularly useful because they allow Java to recognize numbers that contain decimals. It is similar to a float in the regard that both can be used to hold numbers with decimals, but doubles can hold more decimal places than can floats.

boolean:

The boolean is a data type that is represented in code as either "true" or "false." Because of this nature, booleans are frequently used as "on/off" switches

float:

A float is a data type that is represented by real numbers in code, much like the double data type. However, the two differ in that the float ("single-precision 32-bit IEEE 754 floating point" - Oracle) can hold less digits than a double ("double-precision 64-bit IEEE 754 floating point" - Oracle).

char:

A char is a data type that is represented by a single character that is used in the code. To represent the char, enclose the character within quotation marks. Ex: 'j'

short:

A short is a data type that is represented by a 16-byte 2's complement integer which ranges from -32768 to 32767. To interpret the input, Java looks at the left-most integer. If it is 0, the following number is positive. If it is 1, the following number is negative.

long:

A long is a data type that is represented by a 64-byte 2's complement integer which ranges from -2^63 to (2^63)-1. It is essentially a short data type that can hold larger numbers.

References:

http://docs.oracle.com/javase/tutorial/java/nutsandbolts/datatypes.html
www.cafeaulait.org/course/week2/24.html
Mr. Robinette's Website