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 :

-32-bit signed two's complement integer, which

-2^{31} and a maximum value of 2^{31}-1

-Java SE 8 use the int data type to represent an unsigned 32-bit integer, which has a minimum value of 0 and a maximum value of 2^{32}-1.

-Integer class to See the section

-Uses unsigned etc have been added to the integer class to support the arithmetic operations for unsigned integers

Double:

-64-bit IEEE 754 floating point section of the Java Language

-For decimal values is usually default choice

- this data type should not be used for precise values(money)

Boolean:

-only two possible values ex; true and false.

-Use for simple flags that track true/false conditions

- one bit of information "size" isn't something that's precisely defined

float: T

-single-precision 32-bit IEEE 754 floating point

-range of values specified in the section of the Java Language Specification

-for byte and short, use a float (instead of double) if you need to save memory in large quantities of floating point numbers

This data type should not be used for precise values(money)

char: A sixteen-bit unicode character has a minimum value of (0) and a maximum value of (65,535)

Short:
- 16-bit signed two's complement integer. It has a minimum value of -32,768 and a maximum value of 32,767 (inclusive)
-use a short to save memory in large amounts, where the memory savings actually matters.

long:
-64-bit two's complement integer. The signed long has a minimum value of -2^{63} and a maximum value of $2^{63}-1$.ater, you can use the long datatype to
- 64-bit long, which has a minimum value of 0 and a maximum value of $2^{64}-1$. Use this data type when you need a range of values wider than those provided by int.