# Processing Session 1 Game Design Teacher Outline

#### Goals

- Introduce the processing environment
- Comments
- Data types
- Creating variables
- Updating variables
- shorthand for updating (-, ++, -+, +=, /=, \*=)

#### **Comments**

Comments allow you to make notes to yourself. The computer doesn't actually read what gets commented out. You can even "comment out" chunks of code to see what happens.

A multiline comment has two sets of slashes and asterisks.

```
/*this
is a
multiline comment*/
```

A single line comment has two slashes.

//this is a single line comment

### **Data Types**

Name of Data Type	How It's Written	Information It Holds	
integer	int	2	
float	float	2.0	
string	string	"string"	
color	color	(255, 200, 100)	

The color data type is built into Processing. Other languages do not have this.

## **Creating Variables**

To create a variable, **four things** are needed:

- data type
- name
- assignment symbol (operator)
- information to store (of the right type)

Here are examples:

```
int age = 12;
float inchesToFinishLine = 4.5;
string name = "Luc"

color red = color(255, 0, 0);
```

# **Updating Variables**

Updating a variable takes three things:

- Name of the variable
- Update symbol (operator)
- Information to update variable with(can be a combination of values, operators, and other variables)

Here are examples:

```
age = age + 5; which is the same as age += 5;

float = 5.5; which is the same as inchesToFinishLine = inchesToFinishLine + 1;
```

#### **List of Operators:**

Name of Operation	Symbol	Example	Short Way to Do It
Addition	+	age = age + 5	age += 5
Subtraction	-	age = age - 5	age -= 5
Multiplication	*	age = age * 5	age *= 5
Division	1	age = age / 5	age /= 5
Assignment	=	age = 5;	NONE