Exercise 2: IBBO (Input \rightarrow Black Box \rightarrow Output)

I. Summary

This IBBO (Input \rightarrow Black Box \rightarrow Output) application, entitled Pollock, allows users to generate velocity-sensitive, patterned strokes via key presses, mouse presses, and mouse movement. Key presses allow the user to select pattern types, as well as increase or decrease the pattern weight. Mouse presses and mouse movement allow the user to select a color and generate velocity-sensitive, patterned strokes (the speed at which the cursor moves can affect pattern parameters, such as scale). The application uses information regarding pattern type and mouse movement to output the appropriate graphics.

I used the following Example applications to gain understanding of graphics-specific Processing tasks,

- A. Examples > Topics > Drawing > Pattern
- B. Examples > Topics > Drawing > Continuous Lines
- C. Examples > Basics > Color > ColorWheel

Though these Example applications provided means of generating certain graphical elements (such as a color wheel), none of these applications provided flexibility or interactivity (besides elementary mouse movement). However, when used in conjunction with the Processing API Reference (http://processing.org/reference/), I was able to,

- A. Create a grayscale wheel and introduce color selection (via the color and grayscale wheels)
- B. Write multiple patterning types (with the guidance of the Example applications)
- C. Customize the patterning types to allow colorization, weight alteration, and velocity-sensitivity
- D. Create an application featuring a basic UI, as well as means of saving and resetting

II. Functions

A. 1 Key: Pen

B. 2 Key: Variable Pen

C. 3 Key: Variable RectangleD. 4 Key: Variable Rectangle w/ Stroke

E. 5 Key: Variable Ellipse

F. 6 Key: Variable Ellipse w/ Stroke

G. + Key: Increase Weight

H. - Key: Decrease Weight

I. Delete Key: Reset Window

J. Return Key: Save Window

(as window.png)

III. Screenshots





