257 / 757 **Programming in the Arts with Processing** **Homework 3**	**Start:** **Tue 1.21.14** **Due:** **in class Thur 1.23.14** **Goal:** **Responding to the User**

Course Web Site:

http://www.andrew.cmu.edu/course/60-257/

Reading:

Posted on the calendar web page available from the link shown above.

Assignment:

Homework 2 made the figure with your initials more useful. Using variables and expressions, you can draw the figure anywhere and at any size. We will put the figure on hold for a while. In this homework you will do your first work with user input from the mouse. We will combine homework 2 and 3 and add keyboard and mouse input for the next homework (#4).

Specifications:

1. _____Put the following information as comments at the top of your program:
   - homework number
   - a copyright statement
2. _____Add functions definitions for a setup( ) function and a draw( ) function as explained in class, the class notes and code, and in Shiffman.
3. _____Add code needed to the setup( ) and draw( ) functions to draw some "interesting stuff" based on the mouse location and any variables you want to declare and initialize, system variables[1] as discussed in class, and expressions similar to those you used in Homework #2. This is the first of a number of homeworks that are "wide open" in terms of the output the program generates.

Advice:

This is strictly an experimental assignment. You will use what you learn in this work as the basis for doing interesting stuff with your initials that you coded in homework #2 so you want to try as many different ideas that you can.   If you want to poke ahead and add more flexibility, look up the random( ), mousePressed( ), mouseReleased( ), keyPressed() and keyReleased( ) functions.

Grading:

Have your program in the OpenProcessing.org classroom for the course in the Homework #3 sub-collection

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[1] Among the variables discussed in class are: mouseX, mouseY, pmouseX, pmouseY, width, height, frameCount.

Handin of the files:
This will be explained on Thursday. Do not lose your program files.

Serious Advice:
Create a simple figure using variables and expressions similar to those you used in Homework #2 so you get some more practice with this type of planning and thinking. You will need to do in all of the work for the remainder of the term.

10% Bonus:
Explained in class ONE TIME and not posted on the web or discussed in subsequent classes – be there…

Sample:
Here is another e attempt at being "artistic."   The system variables mouseX and mouseY were used to draw this.