

**CPE 123: Introduction to Computing – Computational Art –
Fall 2016
Program 2 – Animated mash-up Surrealism**

Due date: Monday, 10/17 11:59pm

Modality:

- This is a pair assignment. Working from your own processing sketch for Lab 3 (surrealism), you will be partnered with another student in order to combine your two sketches and create a unique animation. You may talk to other students and your instructor to see what they are creating and how they did it. As always, with the exception of your partner, you are not allowed to ‘cut and paste’ code from another student or a tutorial in order to complete this assignment, nor can any segment of your code (which generates a visual component) exactly match another student’s code for this assignment (with the exception of your partner).

Objectives:

- Practice using p5.js
- Practice using methods to encapsulate parts of your code for re-use
- Practice integrating two student’s code
- Practice scaling and translating shapes into a single coordinate frame
- Practice animating via transforms and variables – especially scaling or rotating around a particular point in space
- Practice using conditionals if/else to control your sketch
- Practice developing your aesthetic
- Make an interesting ‘story’ combining two existing designs and adding animation

Requirements:

For this assignment you must generate a combined scene from two different surreal designs that incorporate animation of two elements in the sketch.

Your final combined sketch must have all the original elements placed into a new unified sketch that are either side by side or one of top of the other (please select the option that makes the most sense).

Your final sketch must use methods and animation of the two main elements. Your sketch must also change (using the ideas of surprise and juxtaposition) based on the user clicking within a clearly defined region of the sketch. In the example sketch, clicking on the owl’s face toggles the shapes drawn for the owl face and elephant ears and starts the animation. The sketch must include in total 2 regions of space that can be clicked, each which trigger a difference in the sketch and the sketch must include 3 surprising juxtapositions in total -- *this likely means that you need to add a third surprise to your existing sketches.*

Step 1: Start by modifying your own individual surrealism sketch to use functions if it did not before. Recall that you will need at least a **setup** and **draw** function in your unified sketch. In

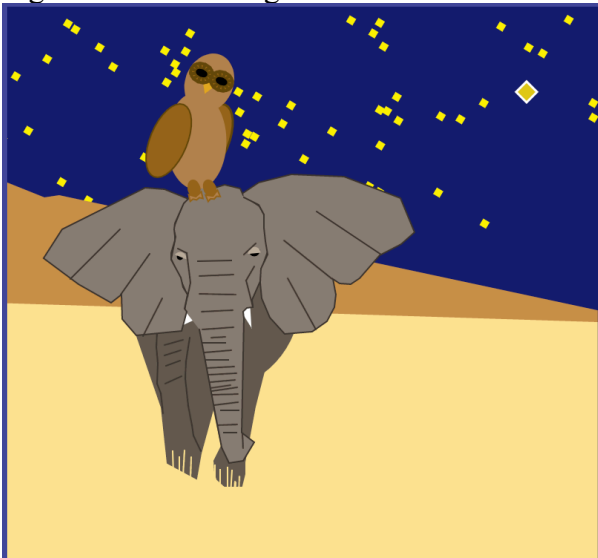
addition, you will need a function to draw the element that will be animated. I also highly recommend including a method to draw any background elements in your sketch.

Step 2: Combine your sketch with your partners. Be sure to modify the size of your canvas to accommodate both sketch's elements. Decide on their placement and offset one of the other's background and main characters to have them appear side by side. See Figure 1 for an example. Your combined code, must include at least two regions that can be clicked by the mouse that triggers a change in the sketch. In addition, the combined sketch must include at least 3 surprising juxtapositions.

Step 3: Add the necessary variables to make at least two elements animate. For this project one of the animations must be a scale or rotation around a reasonable pivot point! For example in the owl-elephant, the owl head and the elephant ears rotate appropriately around pivot points on the animals. *To accomplish this kind of effect, you will need to composite transforms to move the element to the origin, then rotate, then move it back (recall that the order will be the opposite!).*

You and your partner are required to post your sketch to your webpages. Edit the html page that loads the script to include instructions on where to click. The html must also include the starting two reference images. In addition, you must handin your final script code and the associated html page (that loads the script). **Be sure that your sketch code has your name and your partner's name as a 'comment'. You and your partner will also be demoing your solution in lecture or lab.**

Figure 1: The starting state of the sketch combining the owl and elephant from unique sketches



After the user clicks on the face of the owl, its face turns into a human face and the elephant ears turn into butterfly wings.



Another later frame showing the animation on the face and ears (both rotate around an appropriate pivot point)



A frame showing the third surprise in this sketch – when the large star is clicked in the upper right, the stars animate in a circular pattern:



Grading rubric:

30 points: Code combined to make a reasonable scene that includes 2 interactive regions and 3 surprises

20 points: use of conditionals and mouse events to control changes to sketch

25 points: use of functions to encapsulate portions of the drawing and animation included – one animation includes a scale or rotate around a clear pivot point (that makes sense with the sketch)

25 points: Sketch is expressive, interesting and appealing

Note to receive any points, your sketch must be on your webpage with html instructions on where to click