Spatial Media

Assignment 2a

Project 1

1. Find a partner. As soon as you find one, add your names as partners to the Project 1 wiki.

2. Generate a concept together. The concept must:

+ be site specific (i.e. be designed for an actual location)
+ be designed for use by more than one person
+ involve a horizontal surface
+ be more than just cool

3. Design a one-page brief to explain your concept, based upon the template provided (see next page). Think deeply about the context and content before thinking about the actual concept.

Spatial Media

Assignment 2a

The Title by Your Name and Your Name

high quality illustrated image

Context

Content

Concept

Spatial Media

Assignment 2b

To complete this assignment, please download the this Class_02 pocode project from the course wiki.
It includes the new smImage class and demonstrates basic usage of the class. Please complete ALL six problems.

1. Make a 100 x 100 pixel grayscale image in Photoshop and save it as a Photoshop RAW file. Replace the monkey.raw file with your file and change the code to load in your new file. When you run the app, you should see your new image.

2. Add a method to the smImage class called “invert” that inverts every pixel in the image. So, dark pixels will become light and vice versa. This method should be called when you press ‘2’. Make sure to call it just once, in the eventHandler.

3. Add a method to the smImage class called “flipVertical” that flips image the image vertically. This should be done by changing the value of pixels, not by drawing the image upside down. This method should be called when you press ‘3’.

4. Add a method to the smImage class called “blackandwhite” that makes the image purely black and white. So, pixels lighter than the middle gray white become white, and all other pixels will become black. This method should be called when you press ‘4’.

5. Add a method to the smImage class called “threshold” that takes an int T between 0 and 255, and makes all pixels lighter than that value white, and all other pixels black. In your app, set the threshold value to mouseX. (When testing, make sure your mouse is between 0 and 255, on the left side of the window.) This method should be called when you press ‘5’.

6. Add a method to the smImage class called “edgeDetect” that takes an int T between 0 and 255. Compare every pixel to the pixel on its right. If the difference in value is greater than T, set the pixel to black. Otherwise, set it to white. This method should be called when you press ‘6’. Be careful not to access pixels beyond the bounds of the image. You will get an error if you do so.