cis3.5, spring 2009, project II—processing interactivity

overview

- This is the project for unit II of cis 3.5. This project covers interactive web programming using Processing.

- The project is worth 15% of your term grade. It will be marked out of **15 points**.

- The project is due via email on **Friday March 20**.

- Email the project to: sklar@sci.brooklyn.cuny.edu.

- If your project uses multiple files, PLEASE use a **zip** utility to bundle all your files together and send them as ONE attachment to the email.
  on a PC: use **WinZip**
  on a Mac: use **File** - **Create Archive...**
  on Linux: use **zip**

project description

- The purpose of the project is to create an interactive application that lets the user do something fun and/or interesting. This could be a little video game, a flash-card activity, a game like Sudoko or KenKen (http://www.nytimes.com/ref/crosswords/kenken.html), or something else interactive.

- The project has two parts: (1) design, and (2) application. The design is worth 5 points, and the application is worth 10 points. The first part contains written documentation, to be written using a word processor (e.g., in Word) and submitted as a PDF file (preferably). The second part is to be written using Processing or Mobile Processing.

1   design

- This part is worth 5 points.

(A) Describe (in words) the interactive application that you will create. What does it do? How does the user interact with it? If it is a game, what are the rules of play?
Pretend you are writing a "quick start" guide for your application that you can give to a user to intrigue them to buy your application and to teach them to use it quickly.
BIG HINT: Don't make your application too complicated! If you can't describe the rules in 1-2 paragraphs, then your design is too complicated!
ANOTHER HINT: Go back to **labII.1** and remember how hard (or not) it was to create the things you created for that lab. Use your experience with that lab to make intelligent choices about your project design in terms of what you know how to do and what you have time to do.

(B) For each screen in your application (it is okay if your application only uses one screen), draw a picture of what it will look like. Use any kind of drawing software that you are familiar with (e.g., PowerPoint, Photoshop, Illustrator or anything else you know) or you can draw your screen design(s) by hand and scan in your drawings.
The design does not have to be fancy, but it has to be clear. It should show me how you plan for the application to look.

- Try to write in clear English. Check your grammar and spelling. Save your document as PDF, if possible.

2 application

- This part is worth 10 points.

- Using **Processing** (see **labII.1**), implement the application that you designed above.

- Your application should contain the following elements:

  - Different shapes (e.g., lines, ellipses, triangles, etc.) and different colors
    HINT: Look at labII.1 part 1.

  - Interactive aspects — the application should respond when the user presses particular keys or moves/clicks the mouse
    HINT: Look at labII.1 part 2.

  - Animation — at least one of the shapes in your application should move around.
    HINT: Look at labII.1 part 3.

advanced option

- If you are an experienced programmer, you can take the "advanced option" and design and create your application for use on a mobile device using **Mobile Procssing**.
  See http://mobile.processing.org/

- You do not need permission from me in advance for choosing this option. Just do it :-)