CC 3.12 : Computers and Art
Fall 2007
HW Unit G part 2

INFORMATION

- This assignment will be given in two parts.
    - **Part I** is given below on Thursday Nov 28th.
    - **Part II** will be given out next week on Monday Dec 3nd.

- This assignment covers the material from unit G in our syllabus: **Physical Computing and Review**.

- **Part II** of this assignment is worth **5 points**, or 5% of your term grade.

INSTRUCTIONS

1. For this assignment, you will write the answers to the questions below in the text file, along with the Processing Sketch from Steps 1-3 in Lab G4.
2. Name the text file *yourname-HWG.txt*, where *yourname* is your last name. Mine would be *jansen-HWG.txt*. Failure to do this will result in lost points!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
3. **When you are completed with the questions, e-mail the text file as an attachment (no need to zip it) to me:**
    1. My email address is: **chipp@sci.brooklyn.cuny.edu**

The assignment is due (both parts) on **Wednesday Dec 12, 2007** no later than 11:59pm.

PART II. (Every question is 1 pnt each)

Problem 1 Turn IN the Processing Sketch from Lab G4 Steps 1- 3

Problem 2 Turn in the two questions from Lab G4 Step 2

Question 3 Take a look at the following two projects online:

blinkenlights - You might want to watch the documentary video available here, here is another one. (official documentary video warning LARGE file)

a. Describe the project. Where did it take place, and how large was it?
b. How could someone interact with the project?
c. Check This Out: Here is a student project in Finland that just happened (early Dec 2007).

multitouch research - Watch the multi-touch research by Jeff Han available here.

a. What is multitouch interaction?
b. What application areas does he describe where multitouch might be useful?

Review - Searching on the Web

Question 4 One of the most important elements of understanding good search strategies is knowing the difference between "AND" logic and "OR" logic.

1. If we search for democracy AND technology and democracy OR technology, which will give us more results? Why?
2. Using AltaVista, if we search for democracy technology, what will happen? Why?
3. Why is TITLE:democracy probably a better search than democracy?
4. Identify a one-word concept of interest to you (e.g. Shakespeare) and do a TITLE and URL search on it (e.g. TITLE:shakespeare and URL:shakespeare). Which gave more results? Which seems to have given better results?

Review - Computability and Feasibility

Question 5 These questions will help you review computability and feasibility from the lecture G1.

a. Give an example of a program that contains an infinite loop.
b. Define Computability.
c. What is the Halting Problem?
d. Is the Halting Problem Computable? Why?
e. Define Feasibility.
f. Give an example of a computationally infeasible problem.