LCC 6310
The Computer as an Expressive Medium

Lecture 6

Overview

Programming concepts

- Questions about concepts from Tuesday?
- Questions about project 1? (due Friday 5pm!)

Discuss readings

Readings for next week

Look at assignment 2

Project 1

Due: Friday, September 7

From the central heartbeat of the central processor, to the obsessive timestamping of files and blog entries, to ever present clock displays, time is a fundamental feature of computation. *Display the progress of time in a non-traditional way*.

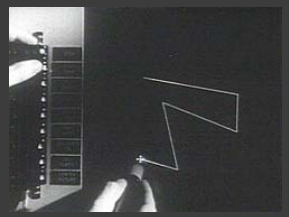
It is OK to consider large temporal scales (e.g. seasons), but smaller temporal scales should also be displayed (or be available to be displayed, perhaps as a function of user input). You may make use of mouse input if you wish.

Readings

Summary presentations & questions for discussion

- *Sketchpad: A Man-Machine Graphical Communication Systems* - Sutherland (NMR p.109)
- *Direct Manipulation: A Step Beyond Programming Languages* - Schneiderman (NMR p.485)

Sketchpad



Sketchpad TV Demo

Xerox Star Interface

Xerox Star and the Professional - 1982
Xerox Star GUI Video - 1984
Xerox Star Demo - CHI 1985
Xerox Star Demo - CHI 1998
Xerox Star Final Public Demo - PARC 1998

Readings for next week

For Tuesday next week:

- Concepts: classes, image manipulation

For Thursday next week: Theory Readings

- Two students: present one reading each
- Everyone else: prepare one discussion question for each reading
  - *A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century* - Donna Haraway (NMR pp.515-542)
  - *The GNU Manifesto* - Richard Stallman (NMR pp.543-550)

Assignment 2

Posted online, due Friday September 14

- A2-01: Using beginShape() and endShape(), create a composition with five or more vertices.
- A2-02: Using beginShape() and endShape(), create a composition with ten or more vertices.
- A2-03: Create an image different from A2-02, but using the same vertex data.
- A2-04: Write a function with one parameter and demonstrate it visually.
- A2-05: Write a function for drawing triangles and visually demonstrate its flexibility.
- A2-06: Write a function with three or more parameters and visually demonstrate its flexibility.
- A2-07: Create a dynamic animation using the cos() function as a generator for motion.
- A2-08: Create a dynamic animation using the cos() and sin() function as a generator for motion.
- A2-09: Move two visual elements across the screen using the random() function as a generator of movement. Give each element a unique nonlinear motion.
- A2-10: Create an event that begins when the mouse is pressed and ends when the mouse is released.
- A2-11: Create a responsive image that behaves differently when the mouse is moving and the mouse is dragging.
- A2-12: Create a button that changes the color of the background when it is clicked.
- A2-13: Program your moving elements from A2-09 but use classes to represent the two visual elements.
- A2-14: Create a subclass of one of the asteroids classes that adds a new capability. Some examples of what you could do: create a subclass of Rocket (or ArmedRocket) that shoots flame when the thrusters are fired and/or plays a sound when thrusters are fired, create a subclass of Asteroid that know when it's been hit (instead of doing this test in loop()), create a subclass of Asteroid that splits into two smaller Asteroids when it's hit.