

LCC 6310

The Computer as an Expressive Medium

Lecture 4

Overview

Programming concepts

Questions about concepts from Tuesday?

Questions about assignment 1?

Look at project 1

Discuss readings

Readings for next week

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.

Let's look at some examples...

(Of course, your own design shouldn't be too similar to any of these!)

Clock Example 1

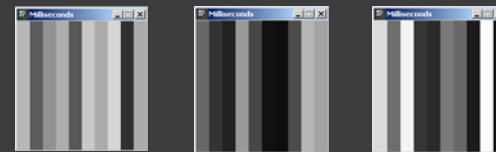
In the Processing examples under [Input: milliseconds](#).

The conceptual strategy is to procedurally generate a kinetic abstract image where the dynamic changes are linked to time.

From the point of view of this assignment, this example is quite weak:

It doesn't give a sense of the passage of time in multiple scales;

The changing grayscale bars aren't connected to any intuitive, experiential sense of time passing.

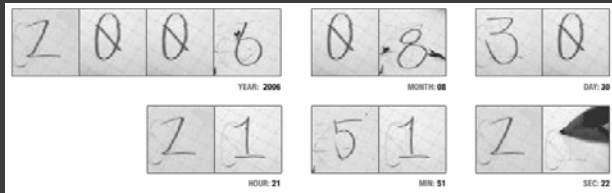


Clock Example 2

Industrious Clock

<http://yugop.com/ver3/stuff/03/fla.html>

The conceptual strategy is to re-present the standard, numeric presentation of time in a non-traditional medium (video representations of paper and pencil).



Clock Example 3

Maeda's Clocks

http://dm.lcc.gatech.edu/~mazalek/courses/fall07/lcc6310/resources/example_maeda.mov

A quicktime video of several screen-based clocks developed by designer John Maeda. The conceptual strategy employed in this series of clocks is to visually redesign standard hands or numeric representations of time.



[[quicktime video](#)]

Clock Example 4

Last Clock

<http://www.lastclock.co.uk/>

The conceptual strategy is to take slices of a live video feed and arrange them in concentric circles representing seconds (outer ring), minutes (middle ring) and hours (inner ring). This way a trace of what has been happening in front of the camera is left behind.



[[quicktime video](#)]

Clock Example 5

Pingpong Clock

<http://www.buovormkrijgers.nl/>

The conceptual strategy used here is to tie the passage of time with events in an auto-played game that unfolds on screen. In this case, the players score the time in a game of pong. The left player scores the hours, and the right player scores the minutes.



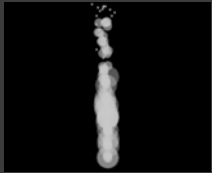
[[quicktime video](#)]

Other Clock Concepts



Subway

The conceptual strategy is to take a familiar rhythmic bodily experience and use it to represent the passage of time. In this case, the changing rhythms of the subway (size and character of the crowd over the course of the day, the swaying of bodies, changing patterns of light and dark in the subway windows) and uses these to represent time.



Bubbles

The conceptual strategy is to take a simulation of a physical or biological process (in this case, bubbles in some fluid) and tie parameters of the simulation (e.g. size and number of bubbles) to the time. A challenge with this conceptual strategy is modifying the parameters of the simulation in such a way that the changing simulation can still be read as the passage of time.

Readings

Summary presentations & questions for discussion

Man-Computer Symbiosis - J.C.R. Licklider (NMR p.73)

Personal Dynamic Media - Alan Kay & Adele Goldberg (NMR p.391)

Readings for next week

For **Tuesday** next week: Java Readings

Concepts: objects & methods

For **Thursday** next week: Theory Readings

Two students: present one reading each

Everyone else: prepare one discussion question for each reading

Sketchpad: A Man-Machine Graphical Communication Systems - Sutherland (NMR p.109)

Direct Manipulation: A Step Beyond Programming Languages - Schneiderman (NMR p.485)