Introduction to Creative Coding with Processing

Week 1 - Course Overview and Basics Thomas Deacon, 2019

Topics

- Programming
- Interaction design
- Information visualization
- Generative art
- Device interconnection
- Multimedia projects

Platforms

- Processing (java)
- Arduino
- Open Sound Control

Useful Resources

WWW

- Processing.org Tutorials
- Kadenze <u>Introduction to</u>
 <u>Programming for the Visual</u>

 <u>Arts with p5.js</u>
- OpenProcessing.org website where people post sketches, get ideas, steal and break stuff

Useful Resources

Books

- Getting Started with
 Processing, O'Reilly, Reas &
 Fry, 2015 (~Basic)
- <u>Data Driven Graphic Design</u>,
 <u>Bloomsbury</u>, <u>Richardson</u>, <u>2016</u>
 (~Intermediate)
- Algorithms for Visual Design
 Using the Processing
 Language, Wiley, Terzidis,
 2009 (~Advanced)

What is code?

- Informal way of talking about computer programming and source code.
- Code is used to make software,
 Apps, websites, experiences.

Programming Languages

Sooooo many!

HTML JavaScript C Perl C++ LISP C# Servlet Java ASP Python JSP Visual Basic Processing Alice LISP Fortran Pascal Smalltalk Go Python

http://99-bottles-of-beer.net/

What is Programming?

Sets of instructions:

- Building Blocks: nouns (describe data) and verbs (process);
- Syntax: grammar (and punctuation)

that can:

- represent data (in data structures)
- express algorithms (using control commands)

Computing is a medium

Not just a calculator.

Interactivity

Motion

Audio Visual Design

Affect

Process

Processing vs p5.js

Difference

Transition from processing to p5

Use the one that works for you!

.now we work.

https://github.com/VizRCA/intro-to-creative-coding