Internet Art II

MAAD 23632 1 (Winter 2023)

The Web represents a grand emotional, sensory, and intellectual adventure for anyone willing to explore it actively. [...] For artists, ignoring the imperative to grasp the cultural implications of the Internet means risking irrelevance. [...] As human discourse adapts to its new home, everything we do and think as human beings will be and is being shaped by new values. [...] If it's ever fair to say that anything has "changed everything," it's fair to say so about the Internet. — Virginia Heffernan

Course Description

Though the web was originally conceived as an online space for sharing hyperlinked documents, the modern Web browser has evolved into a creative coding playground capable of producing all manner of networked art and algorithmic compositions. In this course we'll learn JavaScript, the Web's defacto programming language. Throughout the quarter we'll experiment with various different Web APIs for creating generative and interactive Internet art including HTML5 video, Canvas (2D/3D animations) and Web Audio. We'll learn how to produce work that responds to various input sources (trackpad/mouse, touchscreen, keyboard, cameras, microphones) and how to fetch and incorporate data from external APIs elsewhere on the Internet. This course counts towards the Media Practice and Design requirement for the MAAD program.

Learning Goals

- Foundational understanding of web programming concepts, tools and working knowledge of the JavaScript programming language.
- General understanding of the web's creative potential, by learning how to produce interactive and generative compositions using the browsers native APIs (which may include the DOM, Canvas, WebGL, WebXR, WebAudio among others) as well as through creative libraries (which may include p5.js, three.js, tone.js, aframe among others)

Class Materials

In order to participate in this course you will need to have a decent computer (desktop or laptop with 8-16GB of ram or more) and a modern Web browser like <u>Firefox</u>, <u>Brave</u>, <u>Chrome</u> or others (**do not use** Internet Explorer or Safari, those are subpar browsers). Personally, I will be demoing things in class using Firefox.

You will also need to create a free <u>GitHub</u> account, this is where you'll be uploading your projects (the actual code) before submitting them on Canvas. (*if you are new to GitHub, consider signing up for the <u>GitHub Student Developer Pack</u>)*

You will also need a code editor. In class I will be demoing concepts and creating examples/sketches using netnet.studio. If you're a beginner to code, i recommend using netnet.studio (which I designed specifically for beginner creative web coders), otherwise you're free to use your preferred modern code editor like Atom, Sublime, or VSCode (so long as you know how to get your work published on GitHub using those editors)

Class Discussions

So much of what we're going to cover in class, both in terms of the theory and practice, can be gleaned through your own online research. The most valuable aspect of learning this material in the classroom, rather than on your own, is the chance for real-time interactivity with your professor and peers. I can not stress enough how important it is to take advantage of class discussions. These can be technical discussions (about how the Internet and the Web work, about coding tricks and techniques, and/or any other topic relating to the technology and craft we'll be covering), theoretical discussions (about any of the concepts and ideas introduced in assigned readings and/or addressed by any of the Internet art referenced throughout this course) and/or historical discussions (about any of the various histories we'll be covering this quarter).

If you need to miss class for a legitimate reason (medical or family emergency, professional opportunity, etc), send me an email ahead of time so that I can mark it as an excused absence. Attendance and participation in class is 25% of your final grade.

Assignments

Each student will be expected to complete and submit 3 sketches on the dates specified below. These assignments are creative code sketches/experiments/projects uploaded to your GitHub account, each as it's own repository (repo). The URL for these repos will then be submitted to the class canvas (either as a netnet URL or GitHub URL) by the due date for that corresponding assignment.

These sketches will be based on the demos conducted in class. Each week I will be introducing new techniques and concepts, often building on the previous weeks, and creating sketches together with the class. A sketch can be a variation of something I demonstrated in class, a continuation of a previously submitted sketch or an entirely new one so long as it engages with the techniques and ideas discussed in class.

Each of these assignments are worth 25% of your final grade.

due dates

sketch #1: Jan 23 (end of day)sketch #2: Feb 13 (end of day)

sketch #3: Mar 07 (end of day)