

Interactive Design and the Internet

"Technology is the answer, but what was the question?"

Spring 2018

ART369b: Interactive Design and the Internet

Yale University, 210 Green Hall

Mondays 1:30–5:20pm

<http://spring2018-yale.veryinteractive.net>

Instructor: Laurel Schwulst ... laurel@linkedbyair.net

TA: Matthew Wolff ... matthew.wolff@yale.edu

Overview

In this studio course, students create work within the web browser to explore where the internet comes from, where it is today, and where it's going—recognizing that there is no singular history, present, or future but many happening in parallel. The course in particular focuses on the internet's impact on art—and vice versa—and how technological advance often coincides with artistic development. Students will learn foundational, front-end languages HTML, CSS, and JavaScript in order to develop unique graphic forms for the web that are considered alongside navigation, pacing, and adapting to variable screen sizes and devices. No prior programming experience is required.

Eligibility

This course is open to approximately 14 students. It is required for the 6 graduate students in the Preliminary year of the Graphic Design track. There are approximately 6 more spaces open to undergraduate students who have taken Intro to Graphic Design or Typography courses (Art 132 and Art 264), with preference to art majors and then to seniors of other majors. Finally, approximately 2 spaces are reserved for graduate students in the First year of the Graphic Design track. Interested students with special circumstances can speak to me directly.

Since there is often a high demand for this class, unfortunately not all interested students are admitted. I will be in touch via email on Sunday, January 21st regarding the final class roster.

Class & course design

This course meets for 14 classes.

In general, each class will contain some of the following:

- sharing (lecture, show and tell of examples brought into class, interviews)

- seminar (discussion on readings, student reading responses read aloud)
- working (learning, experimenting, designing, coding, troubleshooting)
- critiquing (spending time with others' work, offering observations, discussion)

During the first third of the course (Classes 1–6), we'll focus on learning specific web markup and programming (HTML, CSS, JavaScript and jQuery). During this phase, each week students will do two things: 1) create a new web-based piece, responding to a simple prompt, that uses and explores the previous week's learned skills 2) write a reflection to weekly assigned readings, in response to a given question.

For the remaining two thirds of the course (Classes 7–14), we'll use and continue developing those skills while completing two web-based projects.

Themes

Throughout this course, students will read, listen, watch, chat, and write written reflections surrounding the following themes:

art.yale.edu — “Have graphic designers moved toward producing platforms, instead of producing contained works? The problem of platform design is like a miniature problem of governance.” We'll learn about the Yale School of Art's website as a primary, intimate example to discuss larger topics of context and community, governance and design, audience, emergent design, the lifecycle of a website, and “undergrounds” online.

Preservation — “A challenge of archiving the internet is its never-ending present. It is elementally ethereal, ephemeral, unstable, and unreliable.” We'll explore a history of the internet as a communicative, informational, and cultural tool and the archiving challenges present in projects such as The Internet Archive (archive.org). Is all digitally-stored information vulnerable? Could the sum total of human knowledge be wiped out?

Primary or secondary — “Do you think of yourself as primarily working ‘on’ the digital or primarily ‘within’ it?” Within the internet context, we'll understand the conflict between subject and object. The object (a website) is often self-reflexive, in that it is both the content and the subject itself, extending the challenges of archiving. Extending this conversation to art, does exhibiting art made specifically for the internet in a gallery detract meaning from the work?

Social networks — “Attention is a finite resource, and how we choose to spend our attention online is, in some ways, a direct reflection of where human culture has gone in an era where access to information is basically unlimited.” We'll take a critical approach to social media, looking at big players like Facebook, Twitter, Instagram, and Snapchat as well as smaller initiatives and micro-communities in which performance plays an important role.

Ubiquity — In the history of computing, we've gone from using a “mainframe,” in which many people share a single computer, to “personal computing,” where there's one computer for one person, and finally to “ubiquity,” where many computers share each of us. We'll read about the Internet of Things, in which all

devices, from remotes to airplanes, contain internet-connected computers. We'll also explore design challenges inherent to ubiquity, with solutions including focus on calm and utilizing the periphery.

Reader

All students will be required to purchase a class reader, which will be available Week 2 from YPPS. (Please stay tuned for instructions on getting a copy.) The readings cover the themes above and include newly published conversation transcripts from our past fall's conversation series about interactive design at Yale. More info: <http://art.yale.edu/Conversations>

Projects

In this course, students will create two web-based projects:

1. **CSS Typeface** — Create a complete typeface using only HTML and CSS with a complete character set (A–Z upper and lowercase, 0–9 numbers, and ?!.,;'"— punctuation). Once you've designed and coded your typeface, create a website to display your complete typeface. On this website, your typeface itself should be used as the primary form of communication. You might ask yourself: What makes a typeface specific to the screen or web? Can your typeface have multiple states? How does your typeface breathe?

Suggested readings:

- a. Tauba Auerbach, "(P)(E)(R)(S)(E)(V)(E)(R)(E)," The Serving Library (2017)
<http://veryinteractive.net/library/perseverance>
- b. Donald Knuth, "The Concept of a Meta-Font," The Visible (1982)
<http://veryinteractive.net/library/the-concept-of-a-meta-font>

2. **Local Website** — Make a website that is only usable in a specific location. It should be designed only for you or a specific group of people in that location to use. It should never be uploaded to the internet. It should also adapt to various screen sizes and devices. Since the website will never be directly uploaded to the internet, you will create appropriate documentation (screen-capture, photographs, videos, writing, etc.) to convey the the website after the on-site critique.

Suggested readings:

- a. Maya Lin, "Making of the Memorial," The New York Review of Books (2000)
<http://veryinteractive.net/library/making-the-memorial>
- b. Paul Ford, "Reboot the World," The New Republic (2016)
<http://veryinteractive.net/library/reboot-the-world>

Interview

During the duration of the course, students will also conduct an interview (in the form of an audio conversation), transcribe it, and create a final edited version as a markdown file (with the extension .md or .markdown). Students are free to interview whomever they want. The interview should be no longer than 2000 words. Each class (starting Week 3), one student will present their interview by providing context for the interview and selecting a few key excerpts to read aloud.

Learn more about Markdown here:

<https://daringfireball.net/projects/markdown/syntax>

If you want to create a site that uses markdown, try making a Kirby or Jekyll site:

<https://getkirby.com>

<https://jekyllrb.com>

Individual class websites

Students will create their own class websites during Week 2, hosted on GitHub. These websites should house all coursework—not only final projects, but also related sketches, reading responses, and one-week exploration pieces. Everything completed in class should appear on the website, as it will be used to determine a student’s final grade at the end of the course. Students should feel free to design this site as well.

Calendar

This calendar is subject to change.

Class 1 — Friday, January 19

- Hand out syllabus
- Fill out survey
- Laurel and Matt introduce themselves and their work
- A History of the Internet
- A History of Internet Art

Students will be emailed on Sunday, January 21 regarding their status in the class.

Class 2 — Monday, January 22

- Interview sign-up
- HTML 1
- Set up individual class websites

Class 3 — Monday, January 29

- Concrete Poetry
- CSS 1

Class 4 — Monday, February 5

- CSS 2
- Coding from Life

Class 5 — Monday, February 12

- JavaScript & jQuery 1

Class 6 — Monday, February 19

- JavaScript & jQuery 2

Class 7 — Monday, February 26

- Project 1, “CSS Typeface” start

Class 8 — Monday, March 5

- Project 1, “CSS Typeface” in-progress

(Spring Break)

Class 9 — Monday, March 26

- Project 1, “CSS Typeface” in-progress

Class 10 — Monday, April 2

- Project 1, “CSS Typeface” final critique
- Project 2, “Local Website” start

Class 11 — Monday, April 9

- Project 2, “Local Website” in-progress

Class 12 — Monday, April 16

- Project 2, “Local Website” final critique group 1 of 2

Class 13 — Monday, April 23

- Project 2, “Local Website” final critique group 2 of 2

Class 14 — Monday, April 30

- Final critique (documentation of both “CSS Typeface” and “Local Website”)

Final versions of all coursework are due via individual class websites on Monday, May 7.

Evaluation

For the first third of the course (Classes 1–6), students will be learning skills by creating a piece exploring what’s unique to the medium at hand every week. (HTML, CSS, JavaScript). These exploration pieces must be turned in on time. (Late exploration pieces will not be accepted.) Ideally, they will be surprising—telling us something new, or telling us in a new way—about the medium at hand. The exploration pieces and the reading responses will be graded on on-time completion. Both must be posted to your individual class website before the beginning of class.

For the second two thirds of the class (Classes 7–14), students will complete two projects. They will be graded on their quality. Projects should both take a stance (be poetic, memorable, critical, and clear) and also be functional (achieve their goals and not break). Please note the invention of useful products is not the focus of this class, but the invention of useful techniques and approaches might be. Taking risks is not only

encouraged but essential to worthwhile exploration and ongoing thinking. Craft (in design, code, and presentation) is also important.

Grading

50% ... Projects 1 and 2

30% ... One-week projects, reading responses, interview

20% ... Participation, diligence, and attitude

Students may change or update their work through the end of the course. Final work will be graded on students' individual class websites on Monday, May 7th.

Academic integrity

Students will become familiar with using pre-existing language, images, and software as raw material while creating entirely new works. While making websites, we will learn which technologies could be appropriated and how to properly credit their inclusion.

Laptops, tablets, and cell phones

While this course is about technology and requires it, the policy in this course is simple: *Be considerate of your fellow classmates.* For example, if someone is presenting their work, please don't simultaneously use your device. Put your device away and provide the presenter your active attention.

Attendance

Attendance is essential. Three or more absences will result in a failing grade. Three or more late arrivals (more than 10 minutes late) equals an absence. If you absolutely must miss class, email me in advance.

Resources

All technologies introduced in class are very well documented online. While general overview of skills are given in class, the best learning happens alone through practice over time. Since the web and its constituent code is constantly changing, there is no one resource that is best. Instead, students should aim to absorb resources from a variety of sources and put them to use through trial and error. If you are having difficulties, please take time to first troubleshoot online by yourself.

If you find yourself stuck while writing code (which is extremely common—even for the best programmers), first try breaking your problem down into smaller, more manageable parts. Search Google or Stack Overflow for how to solve those parts, one at a time. Remember that most of the time spent writing code will be fixing bugs. In fact, learning how to debug is what programming is all about! (And sometimes bugs will allow you to discover something new and never seen before.)

Please note all Yale students have online access to Lynda.com, a website that contains thorough online video courses for all skills learned in this course:

<https://secure.its.yale.edu/cas/login?service=http://www.lynda.com/portal/yale>

You can find all recommended resources on the class website:

<http://spring2018-yale.veryinteractive.net/resources>

Materials

Students should bring their personal laptops to class. They are responsible for their own files, making sure to back them up in some way. For editing and updating code, students should download a code editor such as Atom or Sublime Text. For image-making and sketching, Adobe Photoshop, Illustrator, and InDesign are standard tools available on most Yale computers. Other good digital-image making tools include a phone, digital camera, scanner, screen capture, etc.

†
**'INTERACTIVE'
IS THE WRONG WORD.
IT SHOULD BE ...**
"Unfinished"

Credits

This class has been generously shaped by many. Special thanks to Dan Michaelson and Tamara Maletic of Linked by Air; past teaching assistants Ayham Ghraoui ('17), Julia Novitch ('13), Eric Nylund ('15), and Grace Robinson-Leo ('14); and current teaching assistant Matthew Wolff ('18).

Opening quote:

Cedric Price, an architect, writer, and author of the unrealized Fun Palace, 1964.

Above image:

Brian Eno's *A Year With Swollen Appendices*, 1996.

Last updated Thursday, January 18, 2018.