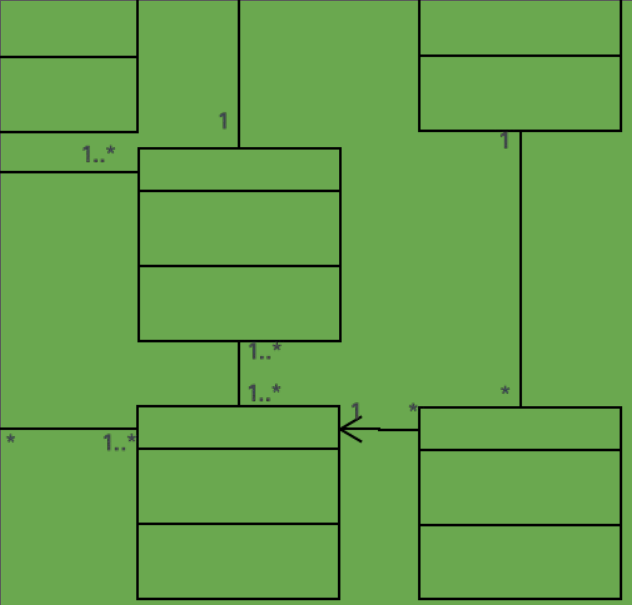


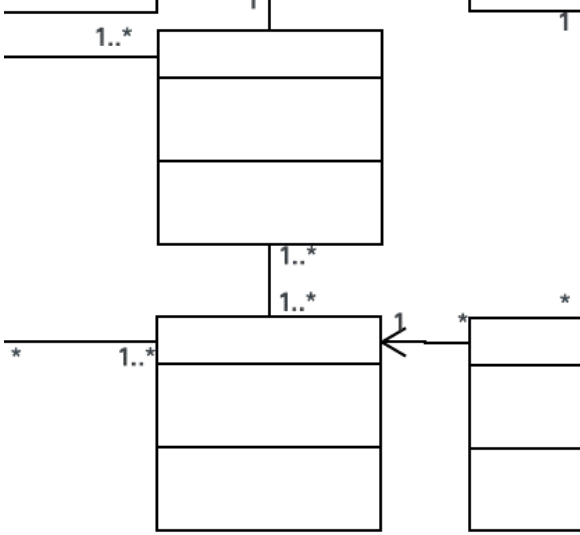
Senior Design I
59866 1HJ

Professor
Madeline Blount

M 6:30pm-9:00pm
City College

plan for today:

- introduction
- course goals/format
- introductions part 2: all of us!
- break
- lecture: software interventions
- discussion: “do no harm”

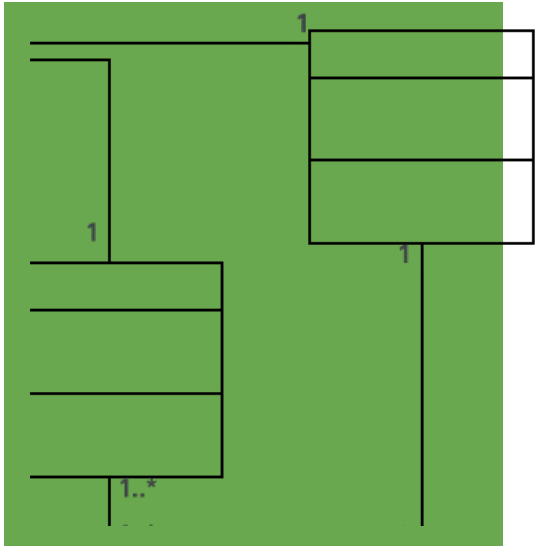


introduction

- A little about me (hello!)
- Madeline Blount
- software engineer, researcher
- Interdisciplinary background: arts, science, politics
- Javascript, web frontend and backend
- Experimental course

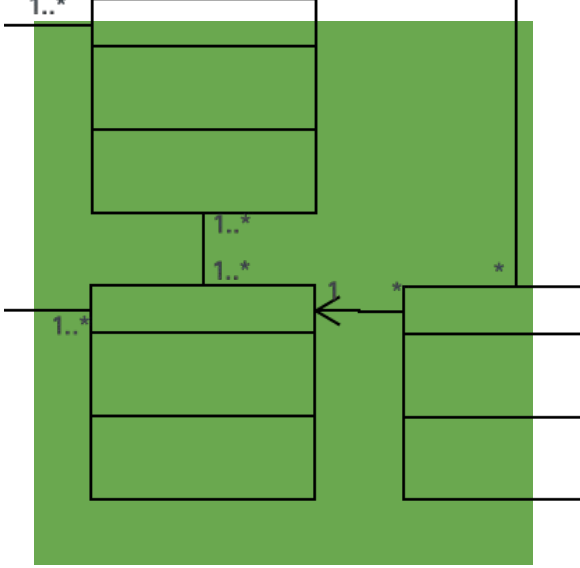
course structure:

- Readings before class, short
- Lecture & discussion
- Live coding/demo
- Group work
- Weekly assignments, project log
- Leading to your final project proposal



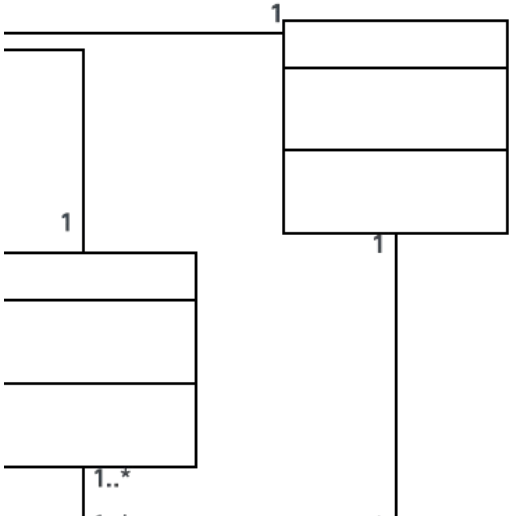
course goals:

- Think critically about technology while we also build it
- Think about how technology affects change in the world (hint: sometimes unexpected ways…)
- Make rapid prototypes with contemporary tools to test our ideas
- Design *systems*, and think about how people fit into these systems



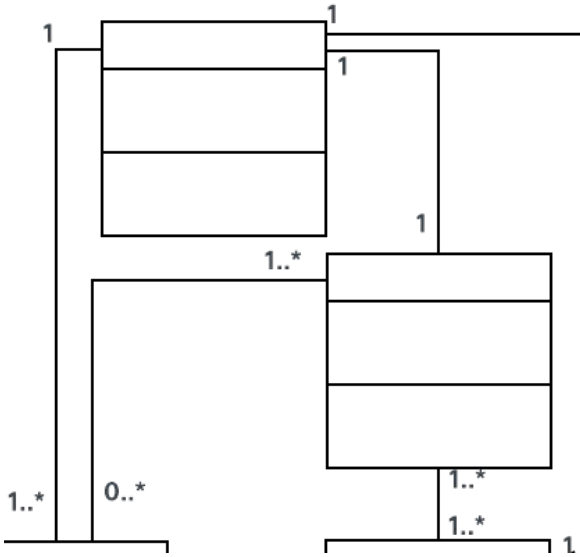
course goals:

- Work together: iteration, collaboration, shared vocabulary
- Get comfortable reading documentation and using new tools quickly
- Idea generation phase for final project
- Use the tools that you have learned to build your own creative project



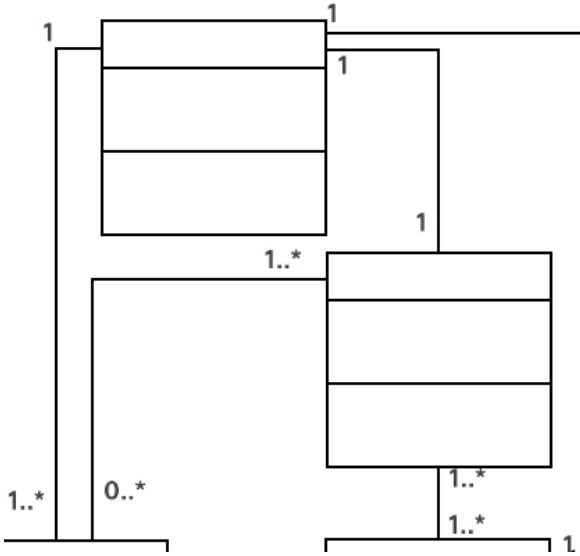
final project:

- Any language, any methodology
- Solo or teams (3 students max.)
- Final for this semester will be proposal (some text about your idea, some diagrams of your system and how you'll build it, some code/multimedia)
- Next semester: build



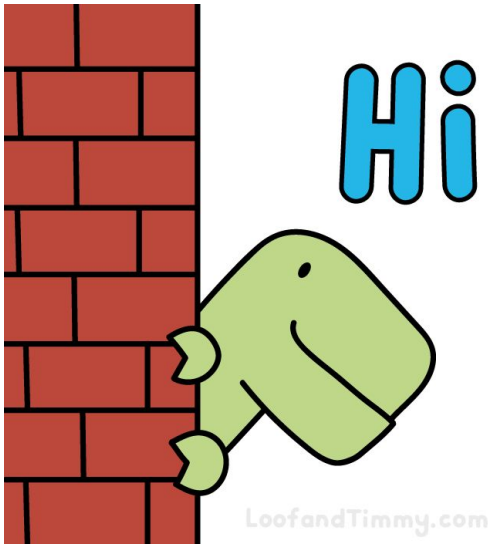
final project:

- Web app
- Chatbot, other bot
- Interactive website
- Game
- Online (or offline) custom tool
- Cartography
- Telecommunications
- Dataset with GUI
- Innovative storage system
- Crypto, ML, AR, VR, hardware …
- *How* and *why* is this software operating in the world?



introductions part 2: all of us!

- name, pronouns
- What has been a main interest of yours in computer science?
- What is something you're into other than technology?



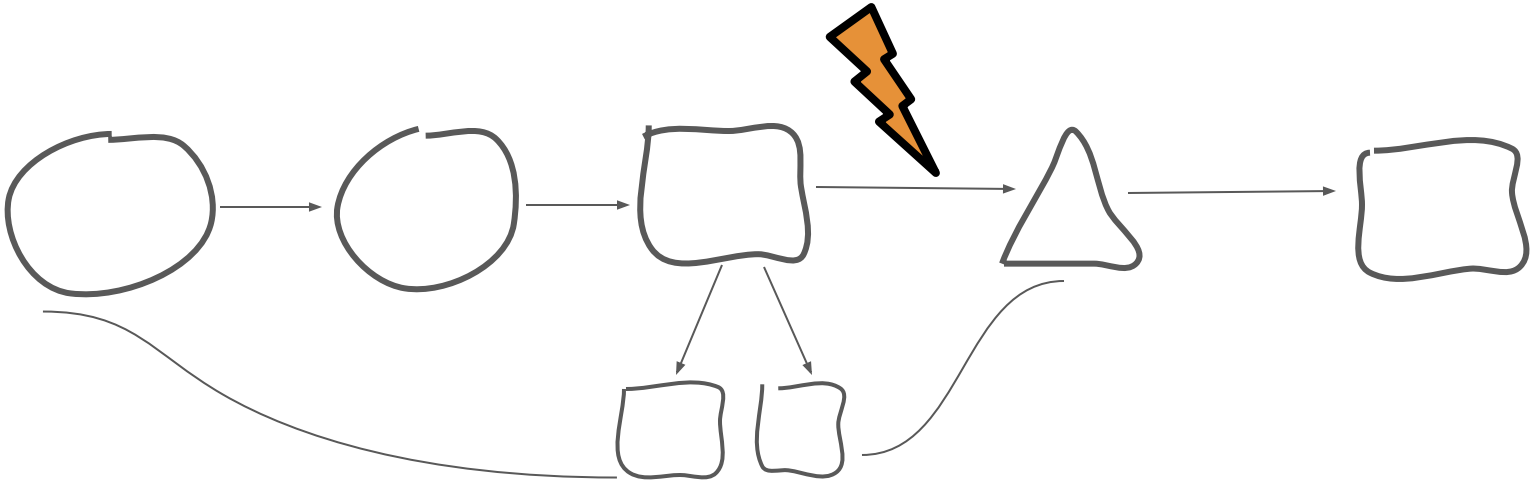
BREAK

what is an *intervention?*

what is an *intervention?*

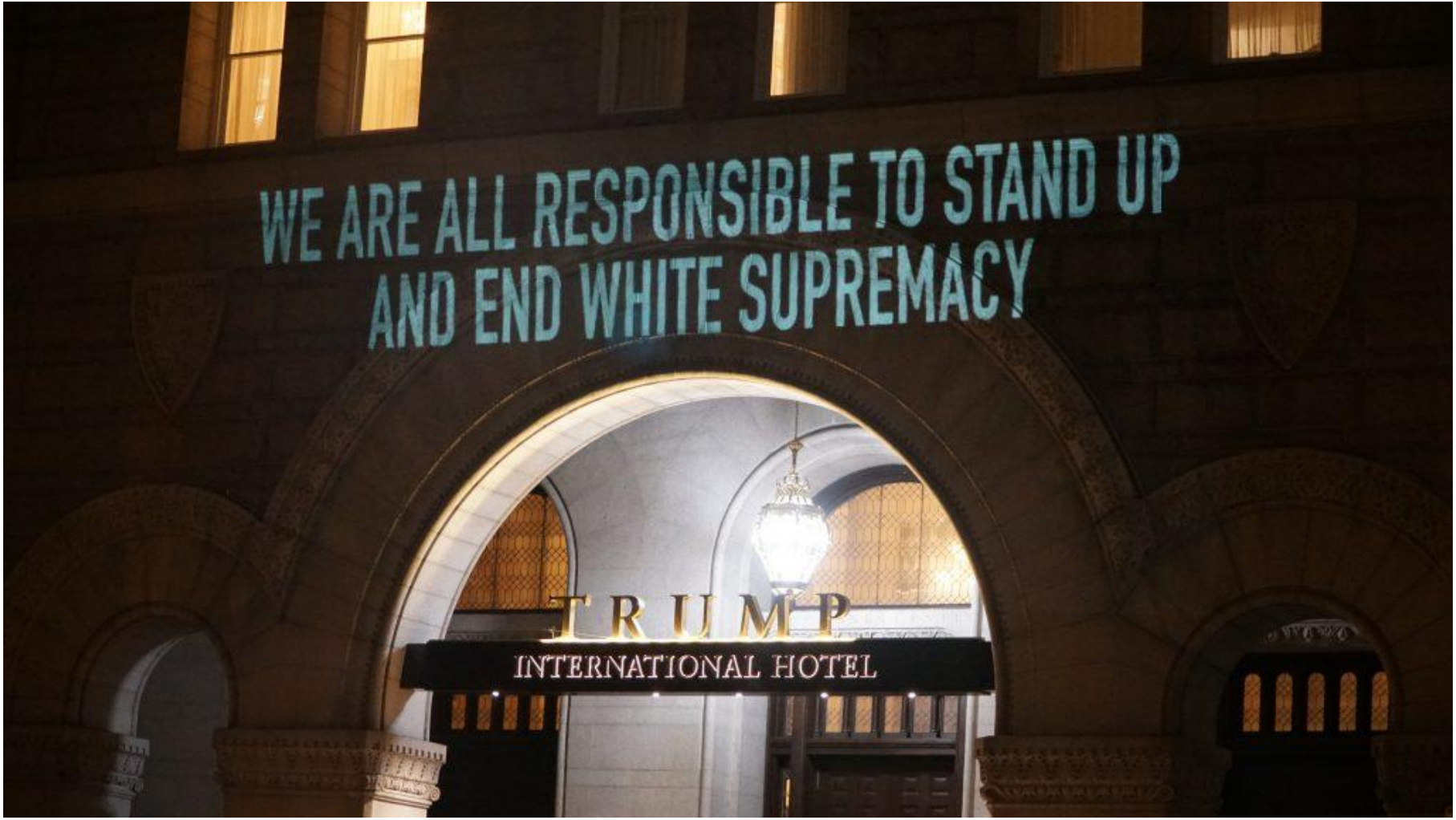
- something that interacts with an existing structure or system
- software exists and acts *in the world*, with other systems in the world
- *how* we design and build matters; *who* builds matters; *for whom*, it all matters - not just *what* we build

what is an *intervention?*



- bottleneck, automation; breakage; allowing users (people) to see something or do something in a new way

SERGIO'S HOUSE
EVICTIONS
STOP
HERE
TEXT ALERTS
@OCCUPYHOMES
to: 23559
OCCUPY HOMES MN
OCCUPYHOMESMN.ORG
CHASE: THIS IS STILL
SERGIO'S
STAND TOGETHER
STOP
FORECLOSURES
Mark R Brown - markrbrownphoto.com


WE ARE ALL RESPONSIBLE TO STAND UP
AND END WHITE SUPREMACY
TRUMP
INTERNATIONAL HOTEL

Beneath Dignity, Stuart Brisley (1977)

disruption?

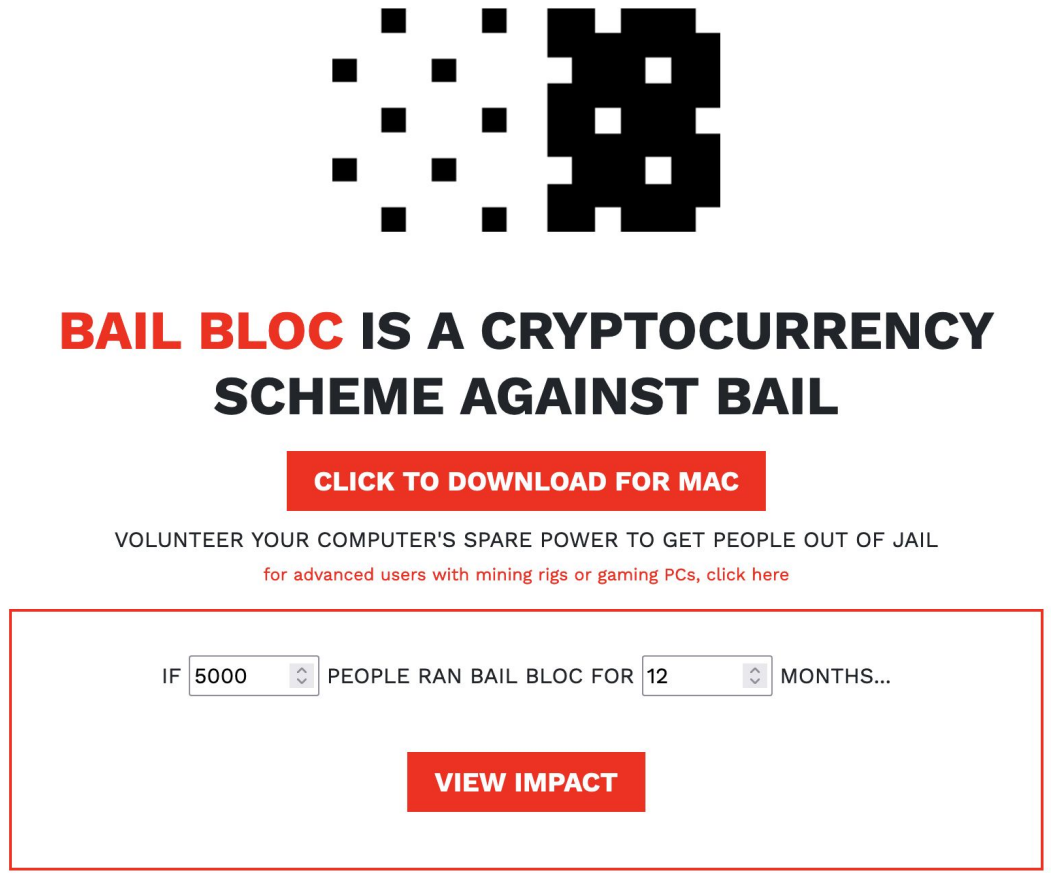
Ethan Zuckerman: “sorry, our intentions were good” (2014)
“Internet’s original sin”

Facebook

Zuckerman, *The Atlantic:* https://www.theatlantic.com/technology/archive/2014/08/advertising-is-the-internets-original-sin/376041/

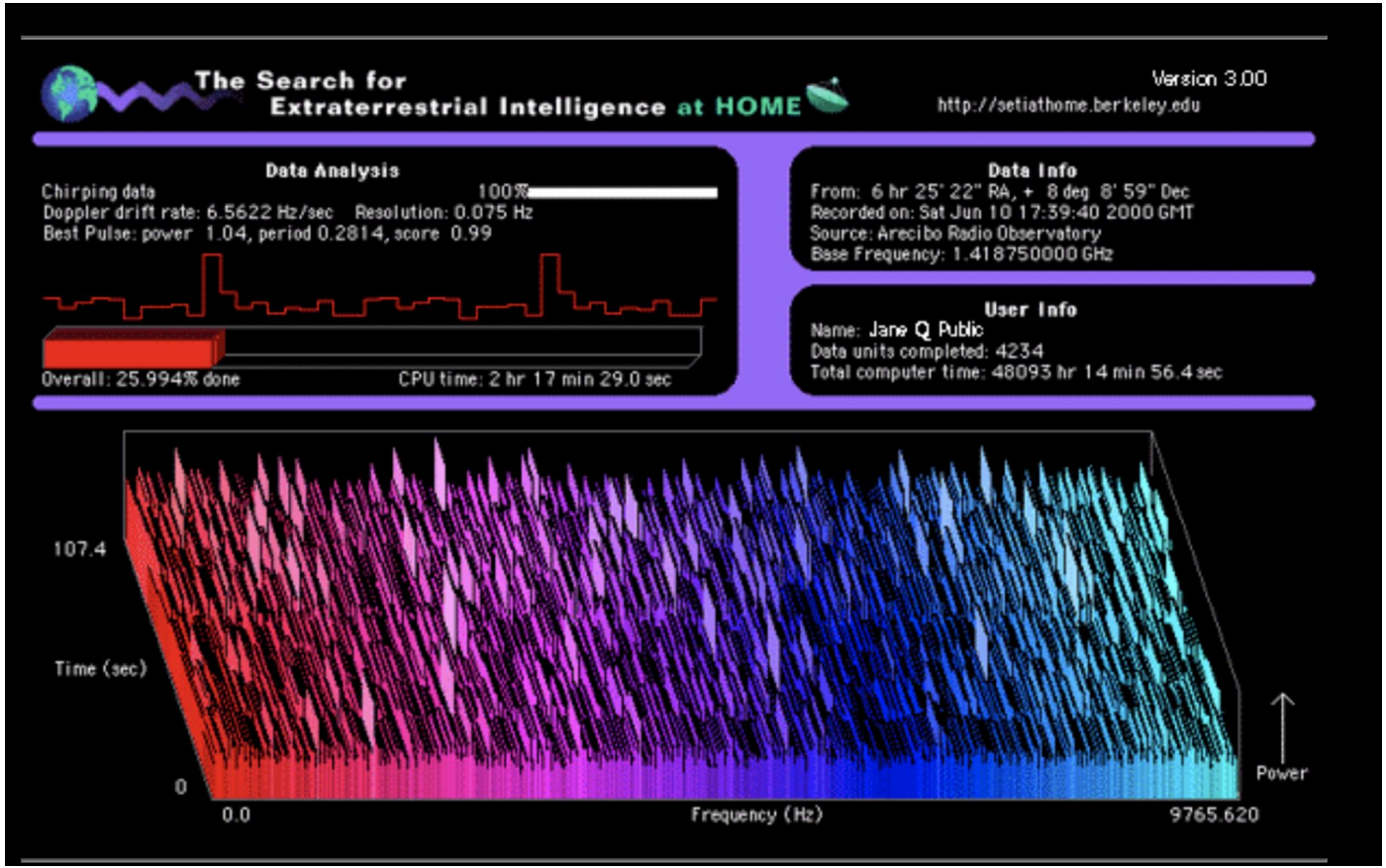
big vs. small

Crypto example:
BailBloc



BailBloc: Grayson Earle, Maya Binyam, Francis Tseng, JB Rubinovitz, Sam Lavigne, Rachel Rosenfelt, Madeleine Varner, Dhruv Mehrotra, Lou Cornum

big vs. small


The Search for
Extraterrestrial Intelligence at HOME
Version 3.00
http://setiathome.berkeley.edu
Data Analysis
Chirping data
100%
Doppler drift rate: 6.5622 Hz/sec Resolution: 0.075 Hz
Best Pulse: power 1.04, period 0.2814, score 0.99
Overall: 25.994% done
CPU time: 2 hr 17 min 29.0 sec
Data Info
From: 6 hr 25' 22" RA, + 8 deg 8' 59" Dec
Recorded on: Sat Jun 10 17:39:40 2000 GMT
Source: Arecibo Radio Observatory
Base Frequency: 1.418750000 GHz
User Info
Name: Jane Q Public
Data units completed: 4234
Total computer time: 48093 hr 14 min 56.4 sec
107.4
Time (sec)
0
0.0
Frequency (Hz)
9765.620
Power

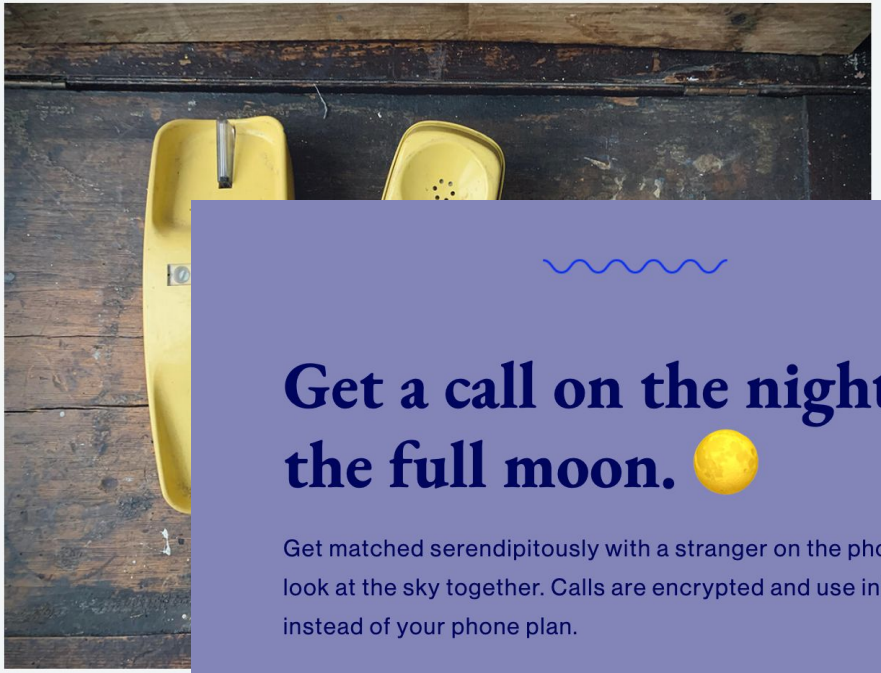
Talk on the phone with someone else stuck at home.

Works on the iOS and Android app Dialup

Your number is for signup purposes only and will never be shared.
You can choose your call settings later.

+1 (201) 555-0123

Next step



Get a call on the night of the full moon. 🌕

Get matched serendipitously with a stranger on the phone to look at the sky together. Calls are encrypted and use internet instead of your phone plan.

How it works.

1. Make an account on the app Dialup.
2. Join the full moon line.
3. Wait for a call on the next full moon.

Quarantine Chat 2020, by Dialup
(Danielle Baskin + Max Hawkins)

Solar Protocol

A naturally intelligent network.

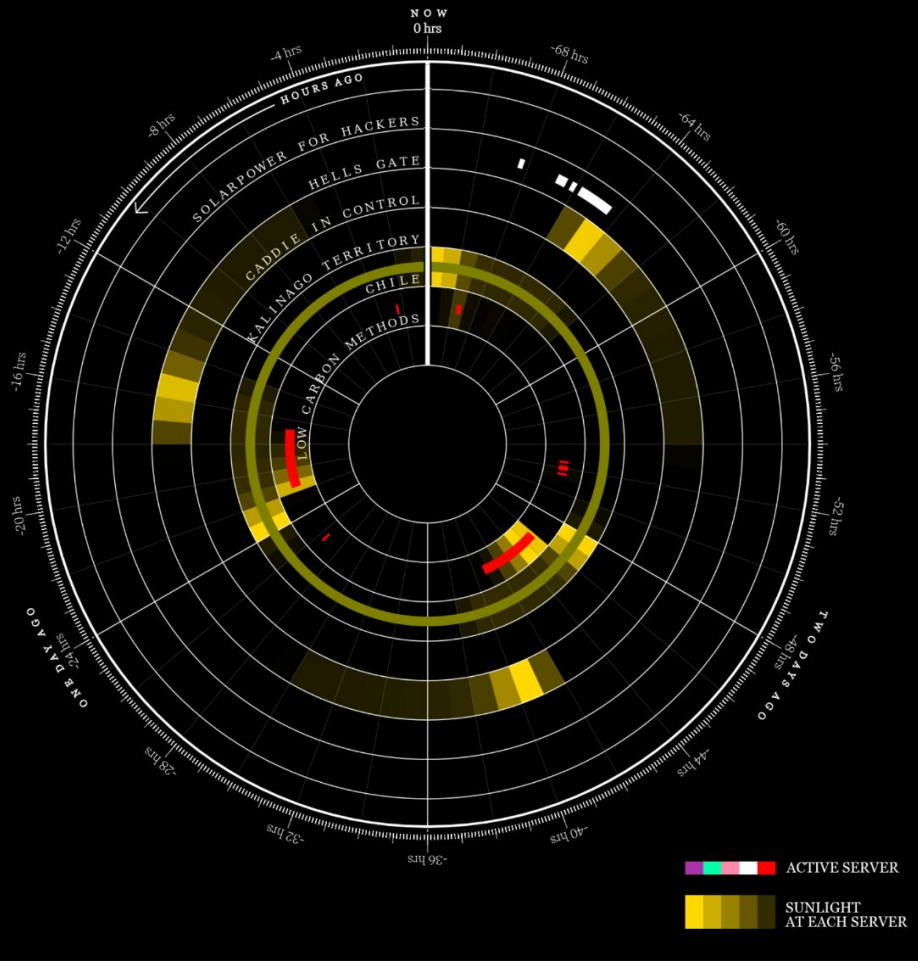
This website is hosted across a network of solar powered servers and is sent to you from wherever there is the most sunshine.

Server Battery:	98.0%
Site Render Status:	High res mode
Last update:	02:02 PM in Australia Melbourne

ACTIVE SERVER

Name: Caddie in Control
Location: Coal City

SERVER STEWARD

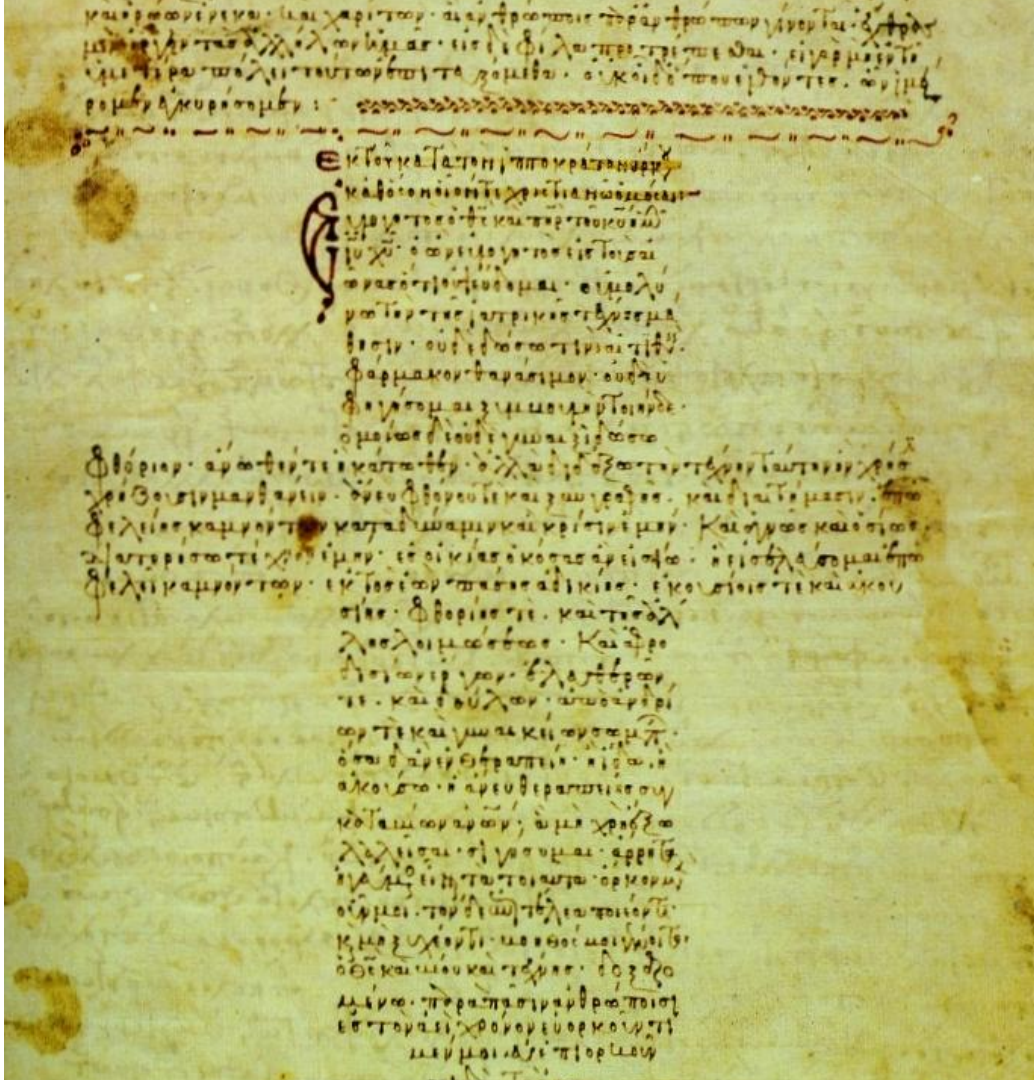


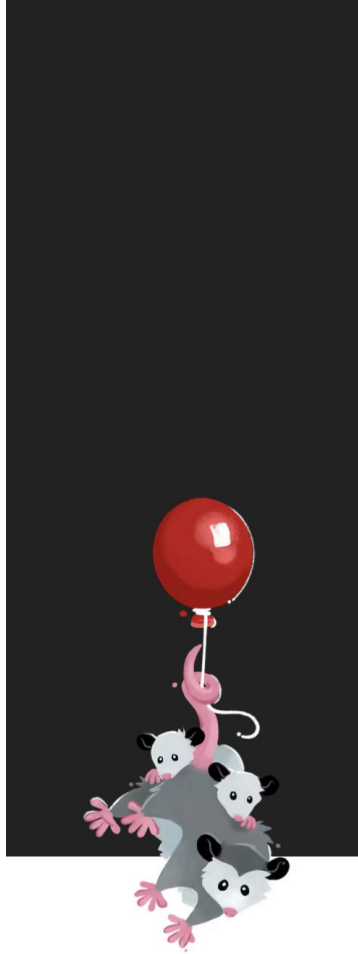
https://solarprotocol.net - Tega Brain, Alex Nathanson and Benedetta Piantella.

BREAK

“first, do no harm”

- Hippocratic oath, medicine
- Modern version



Assignment

- Project log, https://glitch.com
- 11ty, static site generator
- JAMstack
- “Remix” your own, in your own account