Sam Schaack

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Recent Projects

redditclone - psireddit.com | github.com/samschaack/redditclone

- · wrote custom SQL queries for front page and sub pages in an effort to avoid n + 1 queries.
- · wrote full single-page auth in Backbone. js.
- · wrote functions for mouse-drag-expandable images and infinite scroll instead of using libraries.
- · conceived of and implemented the features 1) intra-site tabs (useful for a fully single page site) and 2) a site navigation bar, present on every page, that is activated by certain letters and allows the site to be entirely and smoothly keyboard-navigable.
 - · used css to implement a simple solution for infinite nested comments.
- · learned a lot about how front-end and back-end frameworks interact, and what the proper role is of each.

asteroids - samschaack.com/asteroids.html | github.com/samschaack/asteroids

- · conceived of and implemented a large map (as opposed to the typical screen-size map) with ship held always at center-screen.
- · implemented gravity and collision physics. Collision between two moving bodies was particularly challenging.
- · wrote various optimizations (mostly related to not calculating properties of or drawing objects unnecessarily). This allowed the map size to be very large and contain many asteroids without affecting performance.
 - · currently in the process of writing a node server for multiplayer functionality.

Skills

- · ruby, rails
- · javascript, jQuery, Backbone.js
- ·SQL
- · HTML/CSS
- · git
- · music production utilizing FL Studio samschaack.com/music.html

Education

bachelor of science, physics - University of Washington - 2009-2013 minor in math

- · physics: electromagnetism, quantum mechanics, special relativity, analog/digital circuits
- · math: multivariable calc, diff eq, linear algebra, linear analysis, fourier analysis, statistics