



# *flsh*

An API & front-end to track and grade  
public resources & utilities

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# flsh?

*Have you ever wanted to tell your friends about your favorite bathroom but not your enemies?*

## THEN FLSH IS FOR YOU!

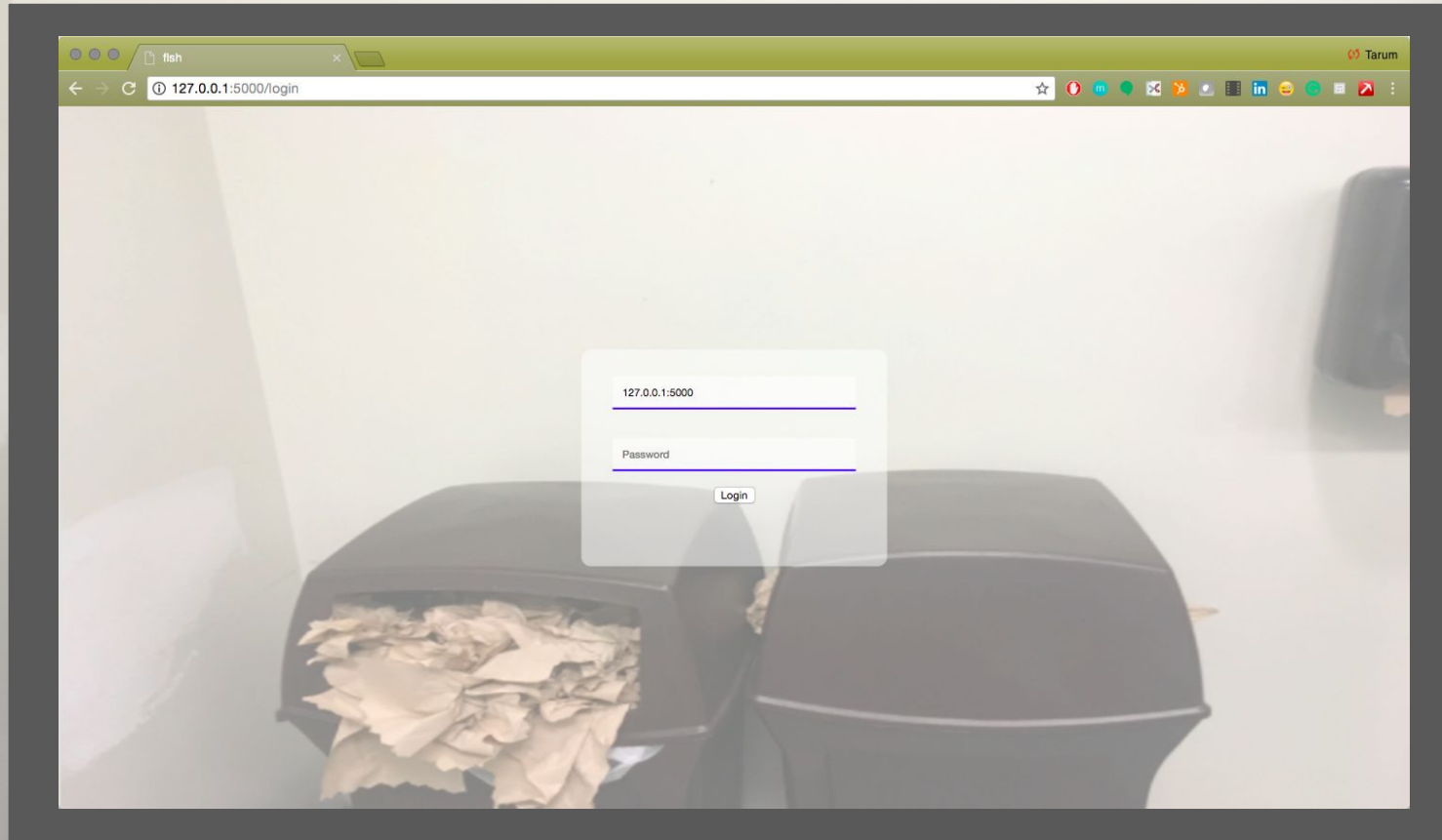
- Flsh is a web based application to track public utilities you find useful, such as public bathrooms, microwaves, water fountains, and so on.
- Flsh uses a dedicated databases for bathroom reviews with fine-grain variables, and more generic reviews for other resources.

# Project Goals

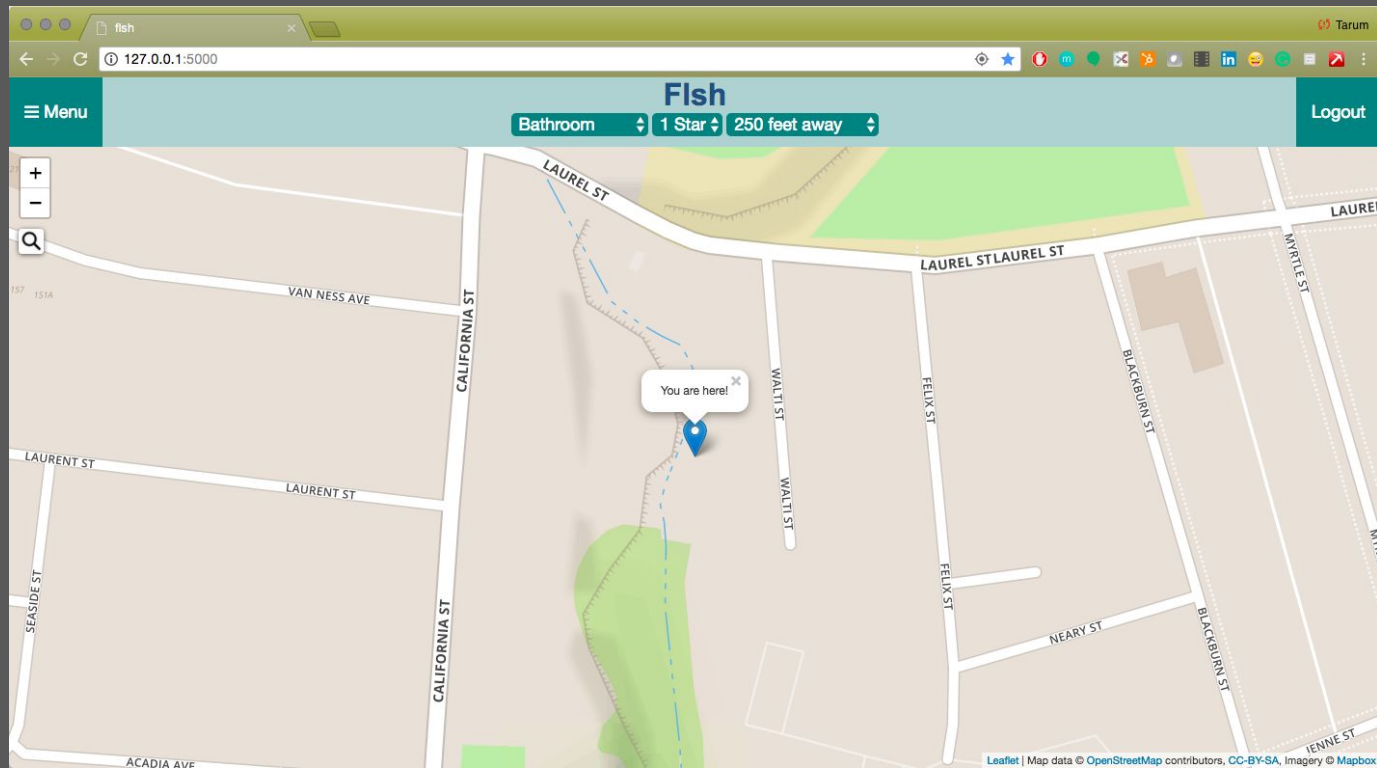
- A server that databases locations of public utilities
- A front end that shows users resources they are interested in
- The ability to add reviews to resources
- The ability to filter by resource, review, or distance
- The ability to submit resources classified by utility
- User Authentication



# Demo



# Demo





# Demo

fish

127.0.0.1:5000

+

-

Q

Flsh

Bathroom 1 Star 250 feet away

Logout

Resources

Dean's Bathroom

Jack Baskin Engineering, 606, Engineering Loop, University of California Santa Cruz, Santa Cruz, Santa Cruz County, California, 95064, United States of America

Building: 9

Cleanliness: 5

Floor: 1

Resource Type: bathroom

Sally's Bathroom

Jack Baskin Engineering, 606, Engineering Loop, University of California Santa Cruz, Santa Cruz, Santa Cruz County, California, 95064, United States of America

Building: 1

Cleanliness: 3

Floor: 32

Resource Type: bathroom

secretbathroom291

Engineering 2, 612, Engineering Loop, University of California Santa Cruz, Santa Cruz, Santa Cruz County, California, 95064, United States of America

Building: 292

Cleanliness: 3

Floor: 1

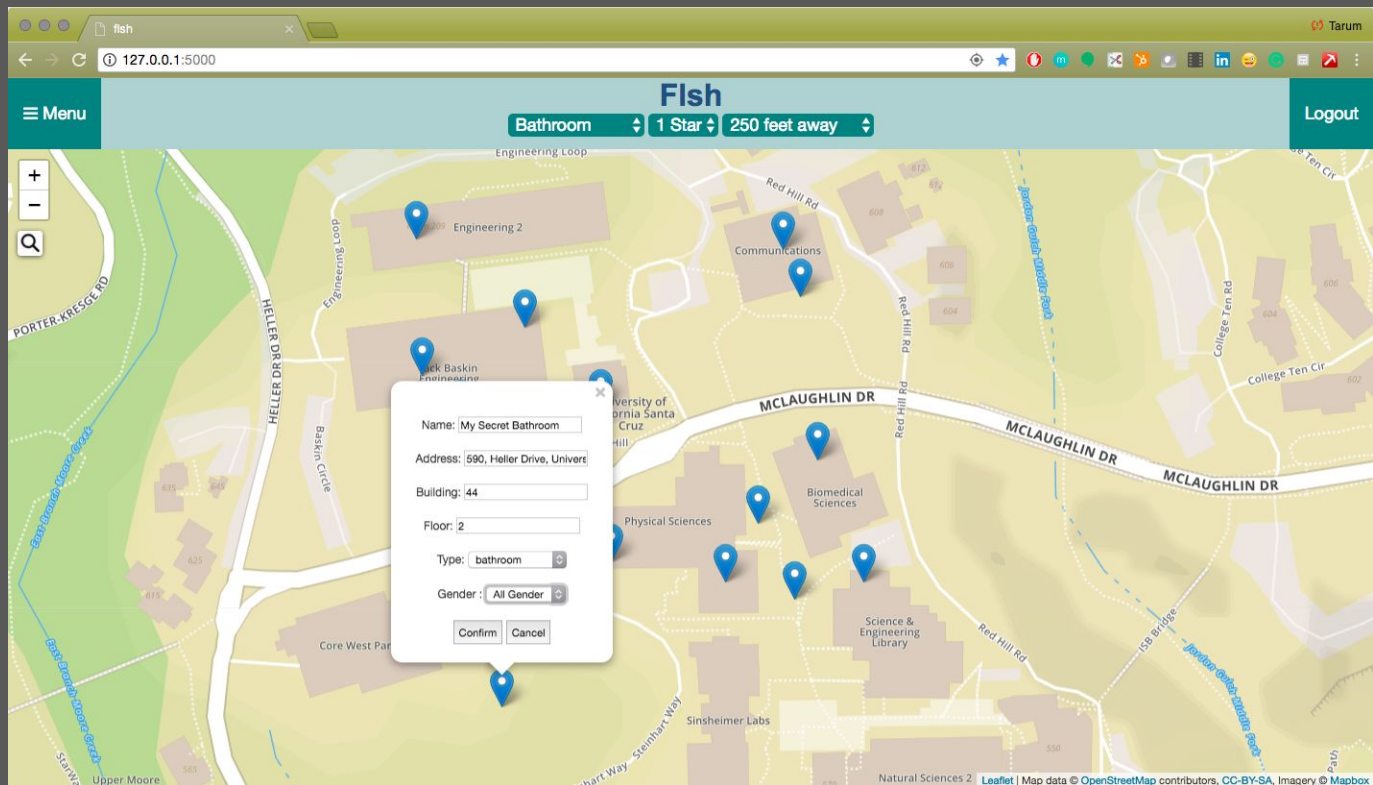
Resource Type: bathroom

Lecture Hall 101

University of California Santa Cruz

Map showing the University of California Santa Cruz campus. The map displays various buildings and streets, including Engineering Loop, Red Hill Rd, MCLAUGHLIN DR, and Heller Dr. Blue pins indicate the locations of bathrooms. The map is titled 'Flsh' and includes a search bar and filters for 'Bathroom', '1 Star', and '250 feet away'. The map is powered by Leaflet and Map data © OpenStreetMap contributors.

# Demo



# Demo

The screenshot shows a web browser window with the address bar displaying "127.0.0.1:5000". The browser's address bar also shows "fish". The application's header includes the name "Flsh" and a "Logout" button. Below the header, there are filters: "Bathroom", "1 Star", and "250 feet away".

The left sidebar contains a list of resources:

- Way, University of California Santa Cruz, Santa Cruz, Santa Cruz County, California, 95064, United States of America**  
Building: 1  
Cleanliness: undefined  
Floor: 2  
Resource Type: water fountain
- Faculty Microwave**  
Physical Sciences, 590, Steinhart Way, University of California Santa Cruz, Santa Cruz, Santa Cruz County, California, 95064, United States of America  
Building: 1  
Cleanliness: undefined  
Floor: 1  
Resource Type: microwave
- Bike Rack**  
Physical Sciences, 590, Steinhart Way, University of California Santa Cruz, Santa Cruz, Santa Cruz County, California, 95064, United States of America  
Building: 1  
Cleanliness: undefined  
Floor: 1  
Resource Type: bikerack
- My Secret Bathroom**  
590, Heller Drive, University of California Santa Cruz, Santa Cruz, Santa Cruz County, California, 95064, United States of America  
Building: 44  
Cleanliness: undefined  
Floor: 2  
Resource Type: bathroom

The map on the right shows the University of California Santa Cruz campus. A pop-up window for "My Secret Bathroom" is displayed, showing the following details:

- My Secret Bathroom**
- 590, Heller Drive, University of California Santa Cruz, Santa Cruz, Santa Cruz County, California, 95064, United States of America
- 44
- Floor: 2
- Resource Type: bathroom
- Cleanliness: undefined
- Buttons: Review, Edit, Delete

A green arrow points from the "My Secret Bathroom" entry in the left sidebar to the pop-up window.



# Demo

The screenshot shows a web application titled "Flsh" running in a browser. The browser's address bar displays "127.0.0.1:5000". The application interface includes a sidebar on the left with a list of resources, a main map area, and a central pop-up window for a selected resource.

**Left Sidebar Resources:**

- Physical Sciences, 590, Steinhart Way, University of California Santa Cruz, Santa Cruz, Santa Cruz County, California, 95064, United States of America**  
Building: 1  
Cleanliness: undefined  
Floor: 2  
Resource Type: water fountain
- Faculty Microwave**  
Physical Sciences, 590, Steinhart Way, University of California Santa Cruz, Santa Cruz, Santa Cruz County, California, 95064, United States of America  
Building: 1  
Cleanliness: undefined  
Floor: 1  
Resource Type: microwave
- Bike Rack**  
Physical Sciences, 590, Steinhart Way, University of California Santa Cruz, Santa Cruz, Santa Cruz County, California, 95064, United States of America  
Building:  
Cleanliness: undefined  
Floor:  
Resource Type: bikera
- 113, Steinhart Way, University of California Santa Cruz, Santa Cruz, Santa Cruz County, California, 95064, United States of America**  
Building:  
Cleanliness: undefined  
Floor:  
Resource Type: bathroom

**Central Pop-up Window (Dean's Bathroom):**

Dean's Bathroom

Jack Baskin Engineering, 606, Engineering Loop, University of California Santa Cruz, Santa Cruz, Santa Cruz County, California, 95064, United States of America

9

Floor: 1

Cleanliness: 5

Resource Type: bathroom

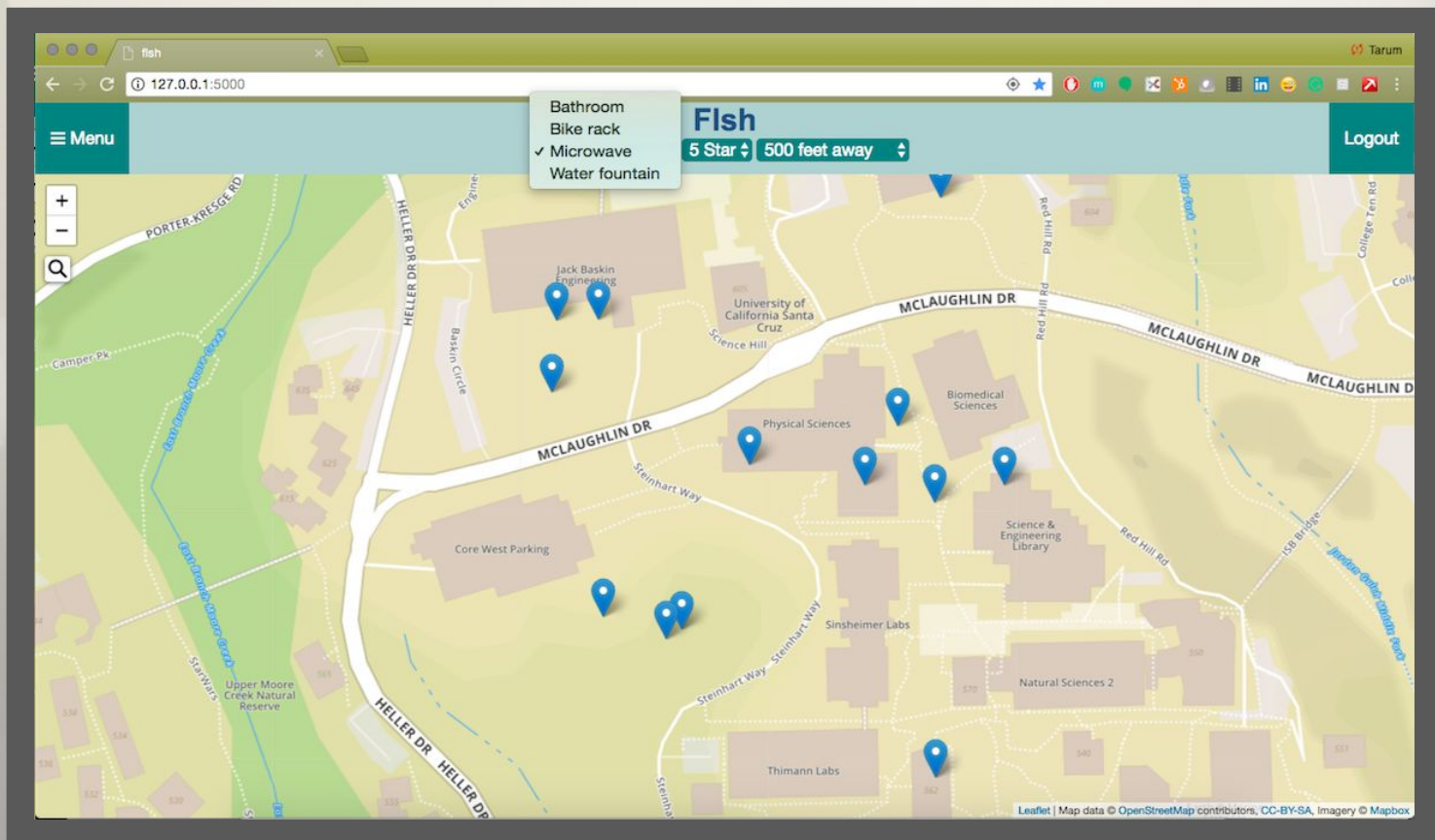
Cleanliness: ☐ 1 ☐ 2 ☐ 3 ☒ 4 ☐ 5

Notes:

**Map Area:**

The map shows the University of California Santa Cruz campus. Key locations marked include Jack Baskin Engineering, Engineering Loop, Engineering 2, Science Hill, and the University of California Santa Cruz. Streets shown include Heller Dr, Baskin Cir, and McLaughlin Dr. A "Logout" button is visible in the top right corner of the map area.

# Demo



# System Overview



OpenStreetMap



## Front-End

*Leaflet.js*  
*OpenStreetMap*  
*OSM Nominatim*  
*JSHashes*

Authenticate-User

Submit-Resource

Append-Review

Query

Query-Results

API



Flask SQLAlchemy



SQLite



python

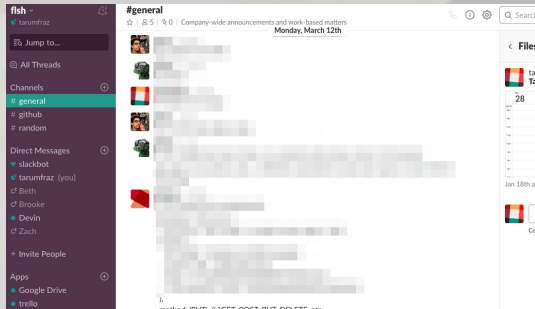
## Back-End

Flask (A Python Web Framework)

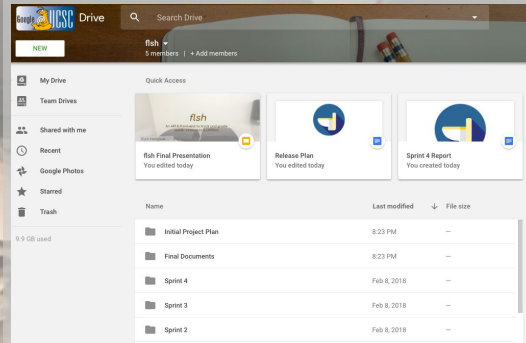
- Flask-RESTful
  - RESTful APIs are all the rage now
- Flask-SQLchemy
  - SQLite (a nice RDBMS)

# Project Management Techniques

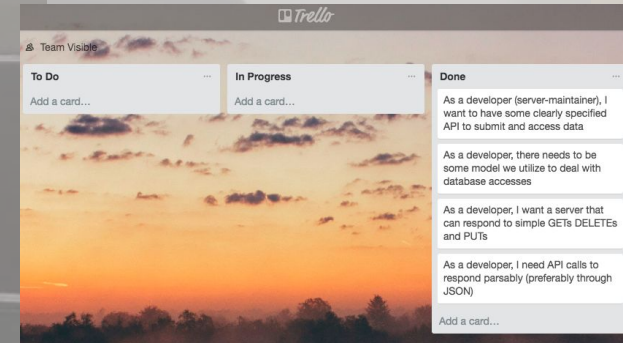
## Communication



## Organization



## Scrum Board



# Our Experiences

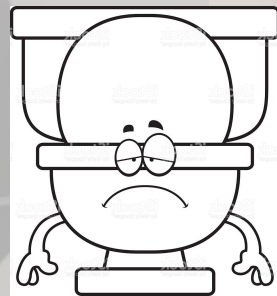
## *Things We Enjoyed.....*

- Learning New Technologies
- Working Together
- Implementing almost all User Stories
- Building a fun application



## *Things We Didn't Enjoy...*

- Merge Conflicts
- Tight Schedules
- Scrum
- Unhelpful JavaScript Error Messages
- SQLite3 has 0 trig functions





# Things We Would Do Differently....

- More Code Walkthroughs
- Scheduling more Code Jams
- Use trello slightly more



*Thank You!!!*

