https://sreeshanath.github.io/Spring%202020/Project%20Milestones/Project%20Milestone%201/index.html
https://github.com/kellangCU/Irrational-Grunting.git
https://github.com/kellangCU/Irrational-Grunting

Team Name: Irrational Grunting (IGRU)
Team Number: 103-5
Team Members:

- Jason Hill
- Etash Kalra
- Sean Masucci
- Kellan Gerken
- Keenan Warble
- Ethan Olander

Application Name: IGRU CU Boulder Campus Event Calendar

Application Description: Campus event app

We would like to create a web app that tracks all campus events in a single, organized, searchable, and sortable location. We want to have the ability to sort and search, change the display to calendar view, as well as scroll through a complete list of every event that has been announced, dating possibly a year in advance. We feel that this sort of application has a purpose on campus because of the lack of organization that currently exists for campus events. There are emails that are sent out, but they don't always do a good job of supplying enough information or display it in an adequate manner.

Our goal is to create an application that utilizes an easy to use frontend, likely as a web application or a progressive web app that will run as if it is native on smartphones. Our backend structure will likely be a database that is sorted into tables by club/organization and house event objects, each event having information like date, time, location, event capacity (if applicable), and any other key pieces of information that we may find as we begin building the events. Ideally, we would have a way to scrape event information from the websites of all of the CU clubs/organizations and then we could automatically populate that information into the database

so that we don't have to manually enter every single event object. This will require some trial and error as well as a lot of leg work, but we should be able to make it happen.

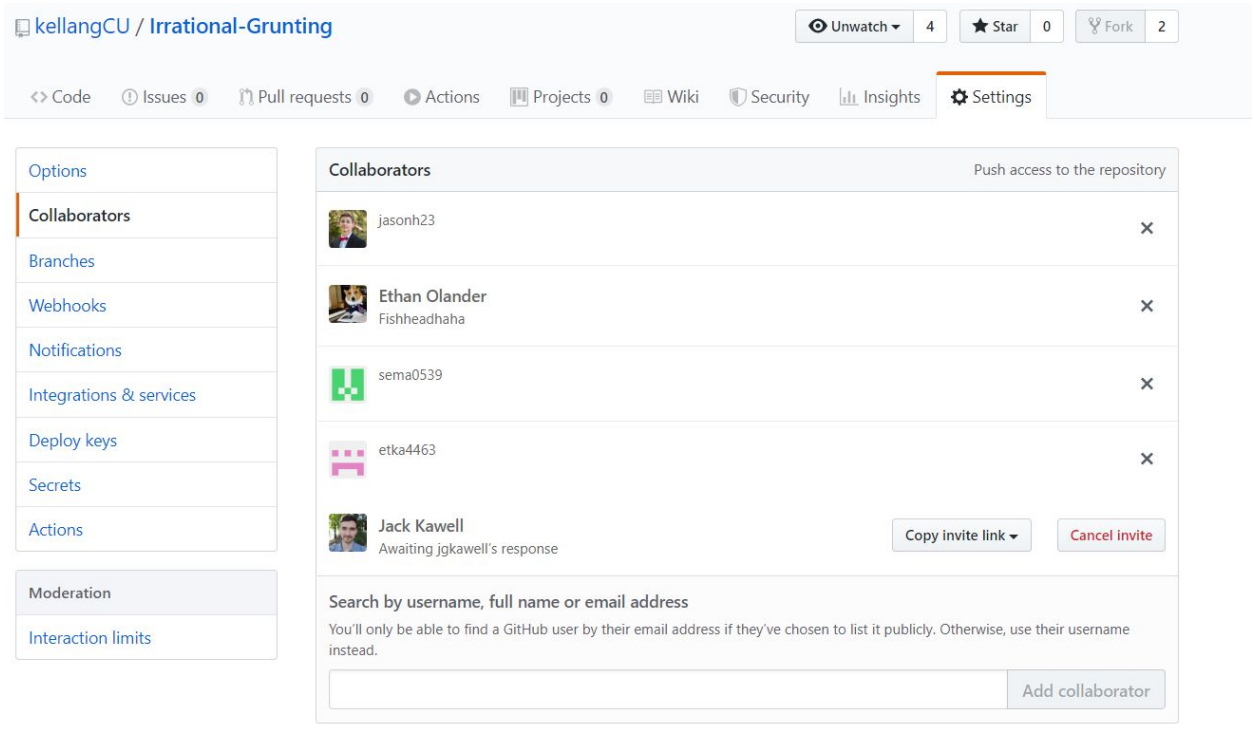
This app will be beneficial for students and faculty, as well as Boulder locals who want to partake in CU events. There will be one central location for them to reference for any event they may be interested in, and it could even be something that CU will want to take control of for themselves if we are able to do it well enough. We view this as a nice challenge with a good, tangible outcome that we can reach.

Vision Statement:

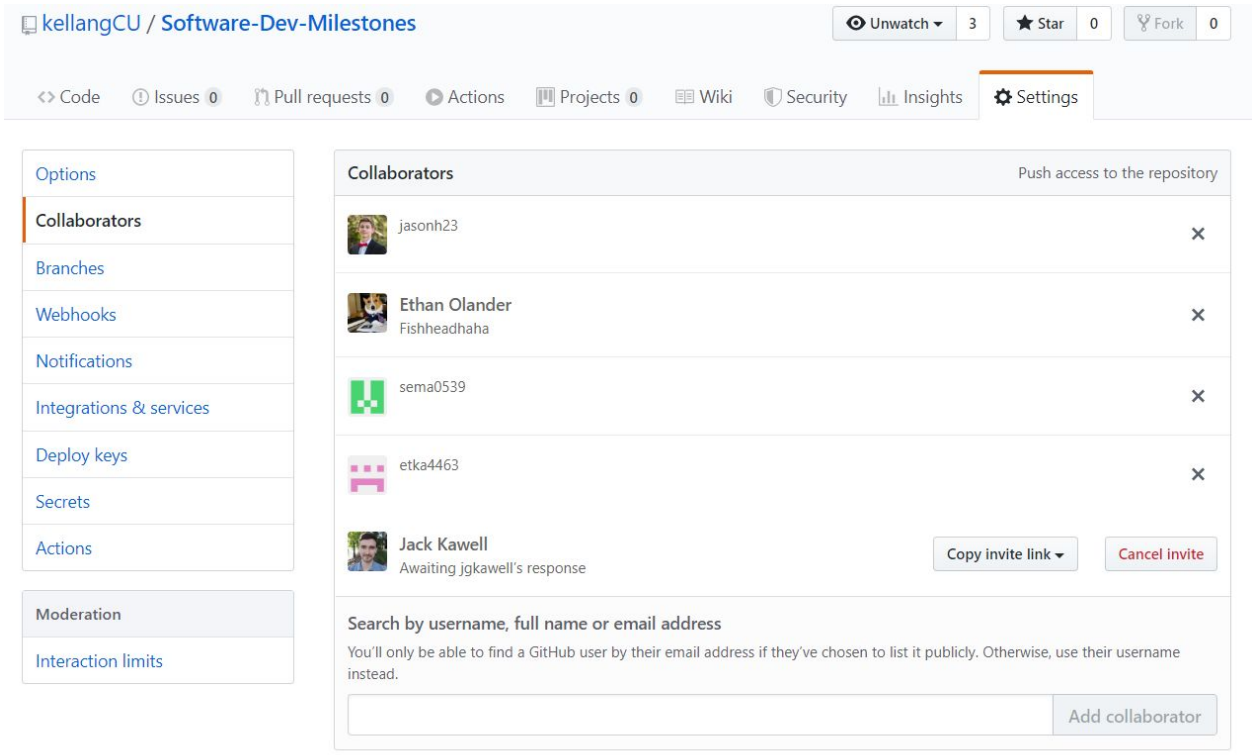
To empower CU Boulder students, faculty, and student organizations to come together and engage with their campus communities by easing the process of finding and attending events on a central campus calendar.

Version Control:

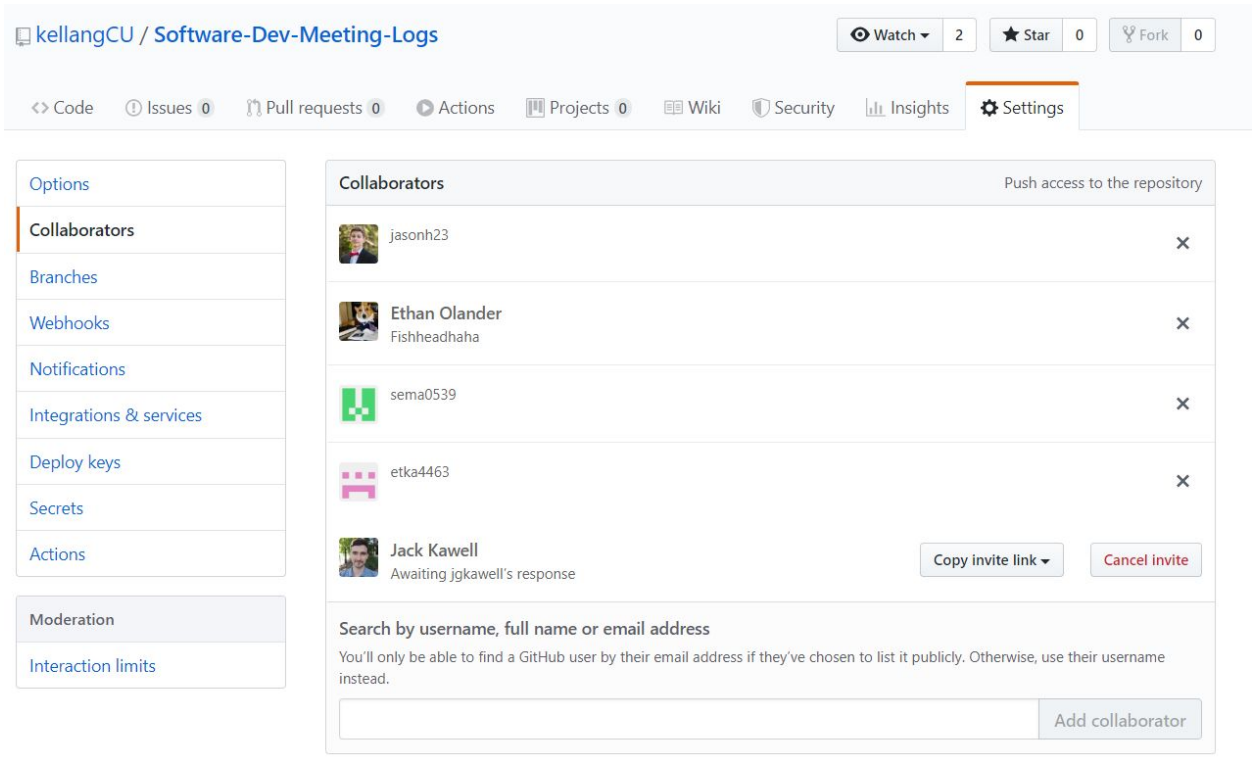
Code repository:



Milestone Submissions:



Meeting logs:



Development Method:

We will be employing the agile/scrum technique. We are going to follow the iterative, cyclical cycle of the agile methodology and focus on creating and testing our software so that it can begin to be deliverable early. We're taking some of the ideas from the scrum by not assigning daily tasks and working in sprints, but we will not be holding daily scrums. We will probably have weekly scrums, instead.

Communication Plan:

Our main communication platform will remain as GroupMe, where we will propose meeting times and locations, as well as inform our teammates of any issues and/or problems that we run into during the development process. We can also utilize Google Drive's communication features and have created a shared folder for all of our documents that need collaborative work, like this one. Google will allow us to message each other when we're on the same document and not in the same location, so we can still collaborate when we aren't at meetings. Additionally, we will always be able to catch each other up at meetings and via email.

Proposed Architecture Plan:

We will be using a web stack comprised of a Front End in JavaScript/HTML/CSS, as well as a Back End that uses either MongoDB or MySQL. We are still deciding which of the two types of databases we should use, as one is a relationship database (MySQL), whereas the other is a more JSON/BSON type of storage technology. The way that the front end and back end will communicate is through a python middleware layer. This middleware layer will do the scraping of the CU events website in order to find events to add to the calendar, as well as initiate the querying process to aggregate data to the front end for display. This full-stack will be hosted on Amazon Web Services so that it can be run through a browser, rather than only on a local machine.

Meeting Plan:

We will have weekly, in-person meetings every Thursday in the Math building library. These meetings will start at 9:30 and go until 11:30. Additional online or in-person meeting times in addition to Thursday mornings will be scheduled if/when needed.

Miscellaneous Notes (Not Part of Proposal)

Notes from my meeting with you about your project (in case you'd like them for reference):

- Website that aggregates events at CU (flyers and emails are a pain)
- Centralized place using the layout of Google calendar
- Clubs and organizations can submit events to the site (needs approval)
- Scraping off CU website or submission through website
- Tags for marking events as recurring or submitting personally instead of officially
- Technologies:
    - JS for frontend (PWA?)
    - Backend could be either SQL or MongoDB
    - Middleware (either Python, or Node, or C#)
    - AWS
- Components:
    - Core:
        - Calendar with events that you can access from the web
        - Users to add events
        - Basic scraping off of CU website
        - User profiles that they can save events to
        - Filter events (tag or time)
    - Stretch
        - Export favorites
        - PWA for phones
        - Search by keyword in description and title

- Jack Kawell