Milestone 1 - Project Proposal

Team number: 104-3
Team name: Orange
Team Members: Konlan Rondini, Nicole Costello, Dylan Sain , Zhongzhi Zhang, Liyang Ru
Application Name: Top Worth
Application Description:

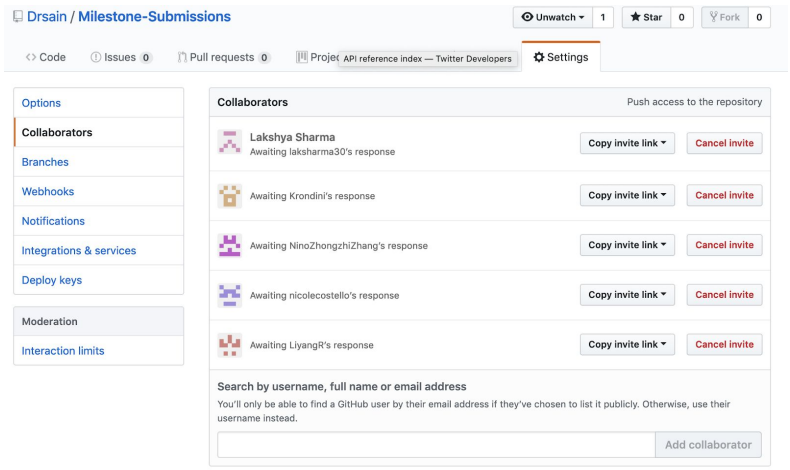
Net Worth Calculator - Have you ever wondered how you stack up financially with other people? By taking in your income and assets, your positive value, and comparing it to your losses and liabilities, your negative value, you can calculate your own personal net worth; simply put, your net worth is a comparison of what you *own* and what you *owe*. This can be useful information because if calculated regularly it can give a numerical perspective on how you are handling your finances; if you have a positive net worth, then you've been saving more than you've been spending and can be reminded that you are in a state of good financial health. Meanwhile if you have a negative net worth, you can pinpoint what is using up a significant amount of your money and potentially reduce that liability to improve your financial health. There's also an amusing aspect to knowing your net worth, some people try to make it a competition between friends to have the highest net worth possible, both enjoying the task while also improving their livelihood.

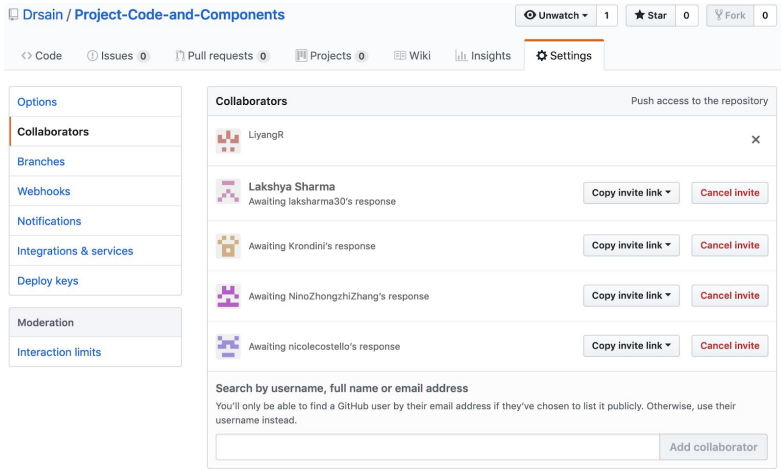
We plan to allow users to manually input their income as well as any physical assets in order to calculate as accurate a positive value as conceivably possible, then inserting their payments on a day to day basis to actively calculate and recalculate the user's net worth. There are several things which we'd like to be able to implement on top of the simple calculation, such as suggestions for improving financial health. If a user has a particularly high liability, a recurring purchase which uses up a significant amount of income, we'd like to be able to notify them of this purchase and suggest spending less on it in order to raise their total net worth. We'd also want to be able to give a user the ability to connect with other users locally, nationally, and internationally. Going back to the idea of friendly competition with one's net worth, a user might find it interesting with how they stack up with someone like Bill Gates or the average citizen of Germany for example; thus we plan to use databases containing this information to accurately compare a user's net worth to any arbitrary person's net worth.

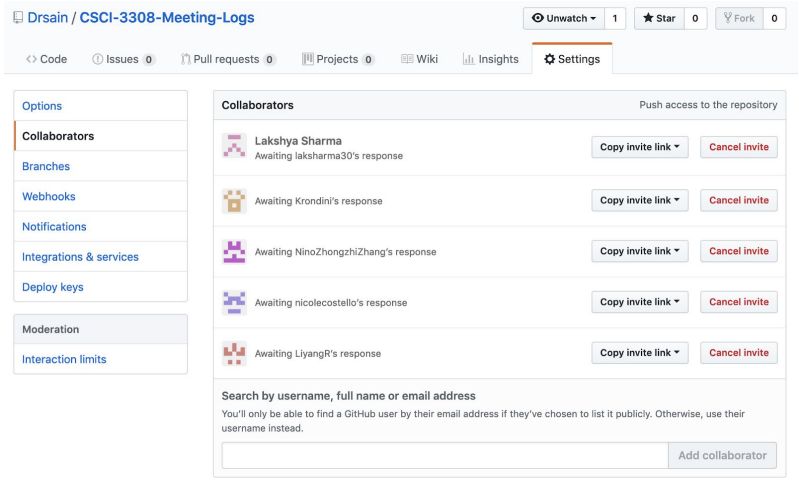
Vision Statement:

To be able to quickly and efficiently calculate the net worth of a person and compare it to other people across the globe.

Version Control:







Development method:

The development method of waterfall will be used during during this project.
The waterfall is a rigid linear model that consist of a sequential phases:

1. Idea and analysis: decided what to do, what will the application look like.
2. Design: understand what kinds of codes we need to bring our application into existence.
3. Implementation: Write the code and create SQL databases needed for the back end, middle layer, and front end.
4. Verification: Check if the code is doing correct job and fix any issues found.
5. Deployment: Deliver the finished product.

Communication Plan:

Over the course of this group project, we plan on using several modes of communication. In order to ask questions and communicate instantly, we have created a GroupMe chat. The GroupMe app gives us a designated space for our team and allows us to quickly and easily communicate. GroupMe allows for us to send links and images which will be useful for quick information sharing between team members. Additionally, GroupMe is available on Androids, iPhones, and on any web browser which makes it usable by every team member. We also plan to communicate in person during our weekly designated meetings and also briefly after or during lab. If we need to meet additional times, we plan to use GroupMe to coordinate that meeting. If there is a situation where we need to meet remotely, we plan to use Google Hangouts to video chat. In order to share and collaborate on more important information such as our deliverables, we will use our GitHub repository.

Proposed Architecture:

We are going to use HTML, CSS and JavaScript in our frontend and design into a live, interactive interface and present the data result correctly and beautifully. On the other hand, Python will be the main technology used on backend. It will build the server and be responsible for the interactions between the server and database, managing it by SQL. They will communicate by JavaScript. The Javascript-powered frontend App UI sends HTTP requests to the backend in order to read, create, update or delete data. The backend returns HTTP responses containing the necessary information for the App to change its state, display data to the user, etc...

Meeting Plan:

Our regular meeting time is at 6pm on Tuesday at CSEL. It will be about 2 hours for a face-to-face meeting. If we can't finish the task and we will have another meeting after our lab class. And it will start from 7:40 pm on Wednesday at the regular place. If emergency, we will discuss in the GroupMe app and set an emergency video chat or another face-to-face meeting.