Sprint 1 Plan GeneSearcher

GeneSearcher 1.0 - March 9, 2021

Sprint 1 - January 13 - January 26, 2021

Members: Valeska Victoria, Charles Knight, Anthony Sagely, Konstantin Sarychev

#### Goals

Develop algorithms to parse user data, query snp database, and setup cloud DB to host data.

## **Sprint 1 Infrastructure**

- Google Firebase
  - Used as a cloud based DB for storing all scraped/collected rsid data
  - Query to firebase DB for comparing user data
  - This allows us to not have to deliver so much data directly to the user, and will cut down on wait time of API calls.
- Opensnp API / Web Scraping
  - One goal is to allow our Firebase DB to perform timed updates to maintain relevant information. Using the Opensnp API and maybe web scraping methods, we can find, store, and update genetic data that will be used for categorizing user data.
- Python + Libraries
  - Most of the project will be written in Python, including future sprints.
  - Multiple libraries will need to be researched and learned, including data management and csv reading/writing (pandas).

### **Sprint 1 User Stories & Tasks**

- As a user, I want to be able to upload my genetic data so that it can be processed.
  - Parsing user data into readable format [3 hours]
  - Creating cloud based DB (Firebase) [5 hours]
  - Filling both DB's, application side and cloud side. [2 hours]
- As a user, I want to be able to view information associated with my genetic data.
  - Querying cloud DB from application side [4 hours]
  - Comparing user data to stored DB [2 hours]
  - Returning readable data to the user [2 hours]

#### **Team Roles**

• Valeska: Project Owner, Developer

Charles: DeveloperAnthony: DeveloperConstantine: Developer

# **Initial task Assignment**

- Valeska:
- Charles:
- Anthony:
- Constantine: