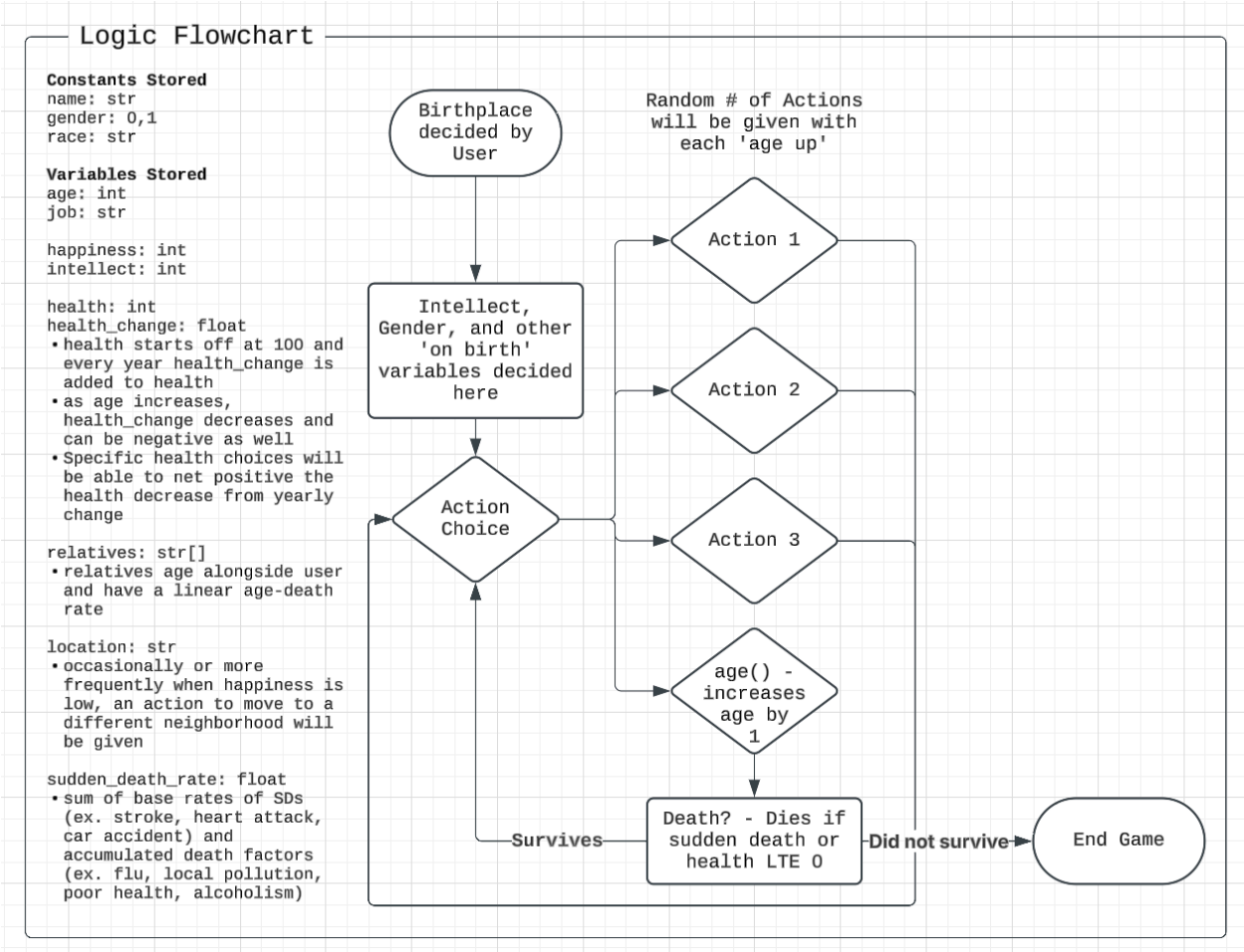
Roster: Stella Yampolsky, Evan Chan, Moyo Fagbuyi, Jady Lei
TNPG: Giraffesnakeotterpenguin
p04-RoH:
2025-04-01
Time Spent: 1.5 hours
TARGET SHIP DATE: 2025-04-25

Brief Overview

Our webpage, called Bit Strife, will mimic a life simulator by using database information and randomness to do a year by year simulation. Users can choose a neighborhood to start with. There will be a user leaderboard.

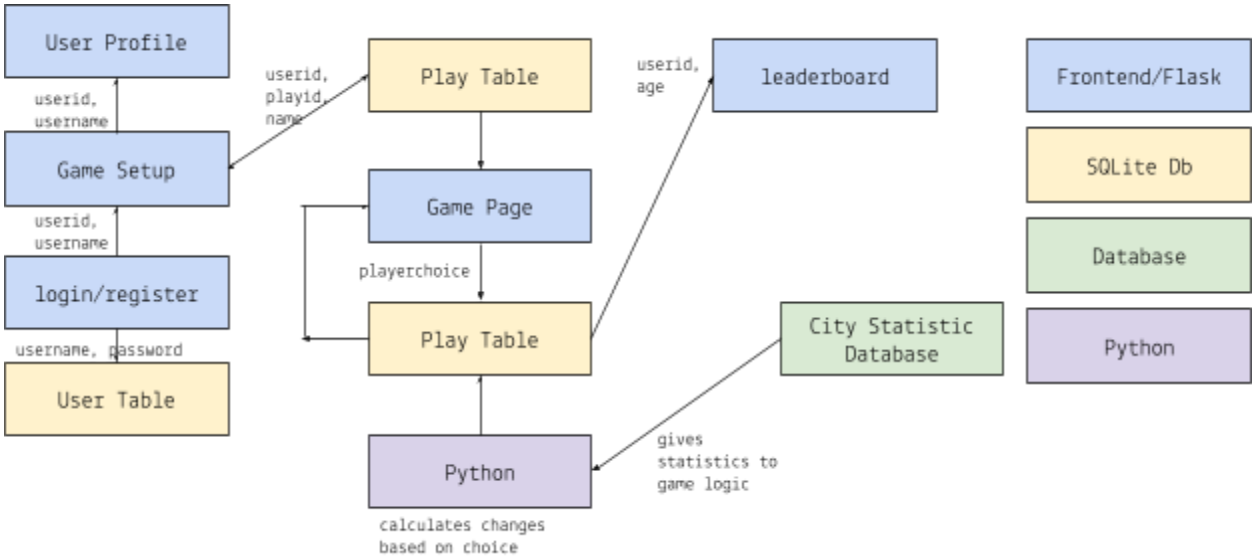
Logic



Components

- Flask App: Host web page, connects frontend and backend
- SQLite3: Backend data storage system
- HTML Templates: Provides the layout for web pages
- CSS: Provides style for HTML templates

- Tailwind: Frontend framework
- Databases:



Frontend Framework: Tailwind

We have decided to use Tailwind, because it is the most friendly framework to most of this team's Devos. We would like to use its cool imaging filters and transitions.

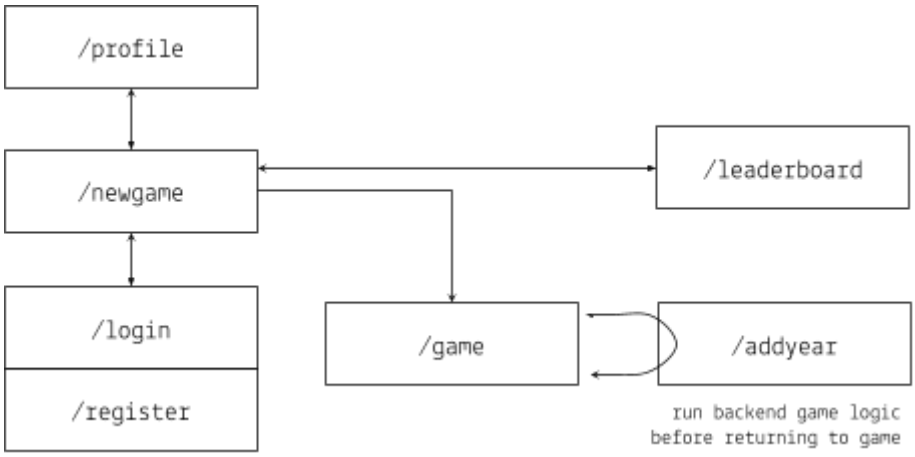
JS Visualization Library: ApexCharts

We have decided to use ApexCharts because its syntax and format seems the most intuitive of all libraries.

Simulation Planning from Datasets

- AIDS by Neighborhood sex, ethnicity
  - Decrease value of health
- Cryptosporidiosis, by Age and Borough
  - Decrease value for health
- Heat Risk Index
  - Weighed per turn determined by neighborhood
- Adolescent Risky Behavior
  - Weigh risky behaviors + assign health decrease values, for ease of programming these are treated as health conditions + have a low chance of being cured each age
    - Smoking
    - Binge drinking
    - Obesity
- Average Cause of Death
  - Chance of death each turn, take age race into consideration for cause

Site Map



Website Database Organization: SQLite

Our project will be using SQLite as Mongo is not necessary and I (, Jady, DB manager,) think that Mongo is more annoying.

User Table:

- userid [int],
- username[string],
- password[string],
- highest score[int],

Play Table:

- userid [int],
- pid[int],
- name[string],
- age[int],
- health[int],
- mental health[int],
- address[string],
- … (alcoholism[bool], wage[int], spouse[bool], children[int], college[int 0-10],))

Task Assignments

Stella: PM + finding + using Databases

Evan: Flask Application

- Account
- Page Layout

Moyo: frontend + JSvisuals

Jady: Database Management

- Create project specific module of SQLite functions

Task	Assigned To
Flask App Development	Evan
Database Engineering	Jady
Simulation logic/statistics	Stella
HTML and CSS/Tailwind	Moyo
Design Doc, Devlog, Testing, and Debugging	All members