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P#02 - The End
2020-01-05

StuyBook (STUYVESANT SOCIAL MEDIA)

Project Objective

Our project is aimed towards providing a fully functional networking site for Stuyvesant students, mostly geared towards self-management, entertainment, and community. By incorporating REST APIs, JavaScript, Flask, and databases managed by SQLite, our site will allow users to meet other Stuy students and develop their personal profiles for multiple uses.

Users MUST register and log in with their Stuyvesant email, so as to protect the authenticity of the platform. From there on, our site focuses on three basic corners: networking, games, and self-management.

In networking, users will have the simple functionality of viewing others' profiles, posting and blogging, viewing others' posts, joining groups and pages, etc. The extra aspect aimed towards Stuy students will be the ability to log your schedule into your profile and view who else is in your classes. This will create a "class group" for students to communicate. On their homepage, users will also be able to see helpful links to the Stuyvesant High School site, Talos, and the Spectator etc.

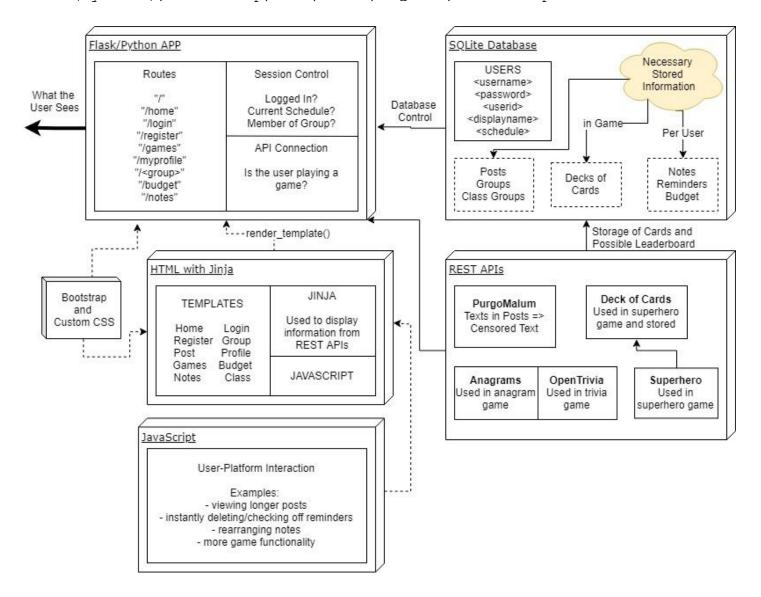
The games corner is pretty self-explanatory, implementing multiple APIs such as a Deck of Cards API and the OpenTrivia API. Players will be able to gain points and see themselves on a leaderboard.

Self-management will be centered around the user's ability to log information, such as keeping notes, reminders, and above all, managing their budget.

We will be using <u>Bootstrap</u> as our front-end framework because of its wider variety of styling templates compared to Foundation.

Component Map

Flask (Python3), Bootstrap, CSS, APIs, SQLite, JavaScript



Dashed lines ⇒ represented through minor code (render_template, external style sheet link etc)

Solid lines \Rightarrow connections created using Flask, API keys, and other tools specified for each component

APIs

	Link	Key?	Returns	Usage
PurgoMalum	https://www.purg omalum.com/	No	Text with curse words filtered out using *	No swearing on our good Christian platform
Deck of Cards	https://deckofca rdsapi.com/	No	A deck of cards with an id and remaining cards when given a number	Superhero battle game
SuperHero	https://superheroapi.com/api/	Yes	Information about a certain superhero by ID (up to 732 heros)	Superhero battle game
Anagrams	http://www.anagr amica.com/api	No	All anagrams given some letters	Anagram game
OpenTrivia	https://opentdb. com/api_config.p hp	No	Questions with their categories and answers	Trivia game

Database Layout

PKs and FKs

USERS

Email	User ID	Username	Password	Display Name	Schedule Index
dleung00@stuy.edu	0	Derek	Leung	Buford	0

SCHEDULES (each period is a column)

Index	Period 1 Period 2
0	Free AP Calc AB

GROUPS

Group ID	Group Name	Post Indices	Members
0	AP Calc AB	[0]	[0]

POSTS

Post Index	Author	Text
0	0	"Hello world!"

SELF-MANAGEMENT

User ID	Notes	Reminder Indices	Budget Index
0	["Work on design doc"]	[0]	0

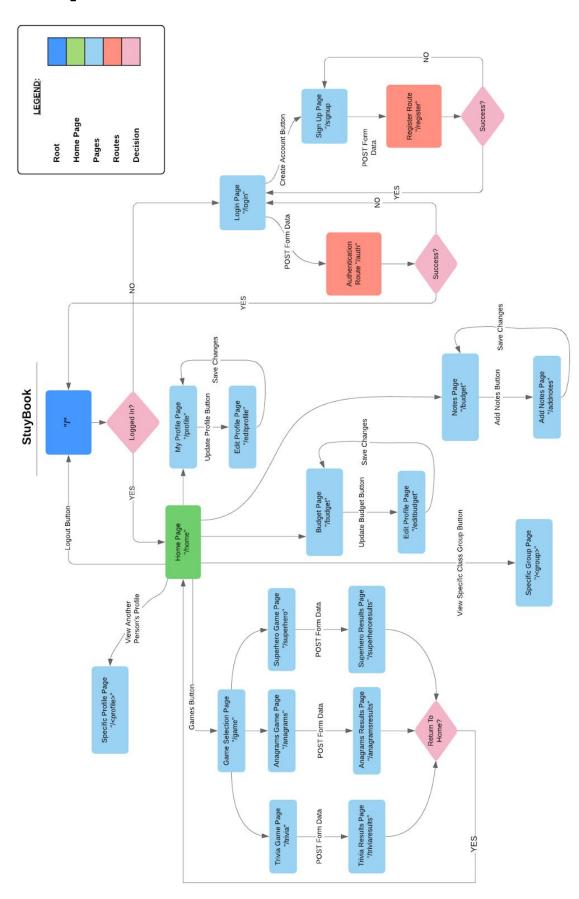
BUDGET

Index	Payment	Date
0	\$100	1/5/2020

REMINDERS

Index	Reminder	Time of Alert
0	"Design Doc Due"	1/5/2020 23:59

Site Map



Development Stages

- I. Creating the App
 - A. Make all necessary connections between components, such as JavaScript, Bootstrap etc
 - B. Add in Login and Register mechanism working with the database
 - C. Guarantee that users must register with stuy.edu emails
 - D. Add in Profile pages in order to work with self-management parts of the project

II. Triple Attack

- A. Networking
 - 1. Blogging Implementation using past projects in the general feed
 - 2. Creating of groups, making and adding others, with database control, public and private
 - 3. Class groups based on schedules, taking in all users' schedules to see classes
 - 4. PurgoMalum API used on texts in posts before they are posted

B. Games

- 1. Superhero game using the deck of cards API and a limited number of superheros from the API (# out of 732)
- 2. Anagram game using the anagram API
- 3. Trivia game using the trivia API
- 4. Leaderboard in ALL games, incorporating a point system

C. Self-Management

- Budget tracking using JavaScript and a self calculating set up
- 2. Reminders set up with dates and alerts, also triggered by JavaScript, viewable in general profile
- 3. Notes stored and editable, also deletable

Roles

- Flask app creator (Tammy)
 - Will create a Python flask application that will have each of the routes we need (mentioned above)
 - Will make sure that the pages that require you to be logged in cannot be accessed by just typing the extension into the URL if you have not logged in
 - Will make sure to flash messages when appropriate to do so (i.e. flashing a login error when submitting a wrong username or password on the login page)
- HTML/Jinja/JavaScript Person (Grace)
 - Will create the HTML templates for each of the routes
 - Will use forms when appropriate (i.e. login page => username and password inputs, submit button)
 - Will use Jinja to take in and display variables when necessary
 - Will pay attention to aesthetic details
 - Will add interaction in web pages using JS
- Database Person (Derek [PM])
 - Will write a Python application to create appropriate databases and tables, making sure to only add them if they don't already exist
 - Will facilitate adding to, editing contents in, and potentially removing from tables
 - Will perform PM duties, and troubleshoot on minor coding issues