DESIGN DOC
Group: Seize The Day
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Roles:
PM - Felix Rieg-Baumhauer
SQL - Gio (facilitates communication between the db and the user's input)
Backend - Sachal (especially involved in the mechanisms that will allow for users to enter info)
APIs + libraries and UI Frontend - Kathy (syncing with maps, CSS and some special effects)

CSS Framework:
Bootstrap

API:
Google Maps API
OCR API

Project Description:
As highly social creatures, human crave to interact with other humans. To accomplish this humans often assemble in specific locations, where they can meet with humans whose companionship they value (friends). Our project aims to facilitate and aid this process. By using our product, exclusively for stuy students, students will able to create accounts, over which they can tell their fellow students where they are, both in Stuyvesant , and in the surrounding area.

Intended use:
- After having created an account, users will be asked to login
- After this step they will emerge on the "Welcome page"
- On this page they can:
    - Share where they are currently
    - Share when they leave that specific place
    - Upload their current Stuy schedule
- Additionally, on this page, the user will see any part of their profile, and see their own whereabouts
- In addition, the welcome page will have the links (buttons), that will allow for "friending"

- Friend's whereabouts (and in early stages all users whereabouts), will be visible on the welcome site.

Databases Structure

***SLIGHT CHANGE, only one db now, users.db, with 4 tables, as below.

Users table

User ID	Username	Password	Current Loc	Time	Calls
INT	TEXT	TEXT	TEXT	Timestamp	TEXT

Sched table

Sche d ID	Pd1	Pd2	Pd3	Pd4	Pd5	Pd6	Pd7	Pd8	Pd9	P10
INT	INT	INT	INT	INT	INT	INT	INT	INT	INT	INT

Friend table

user1	user2
TEXT	TEXT

Message table

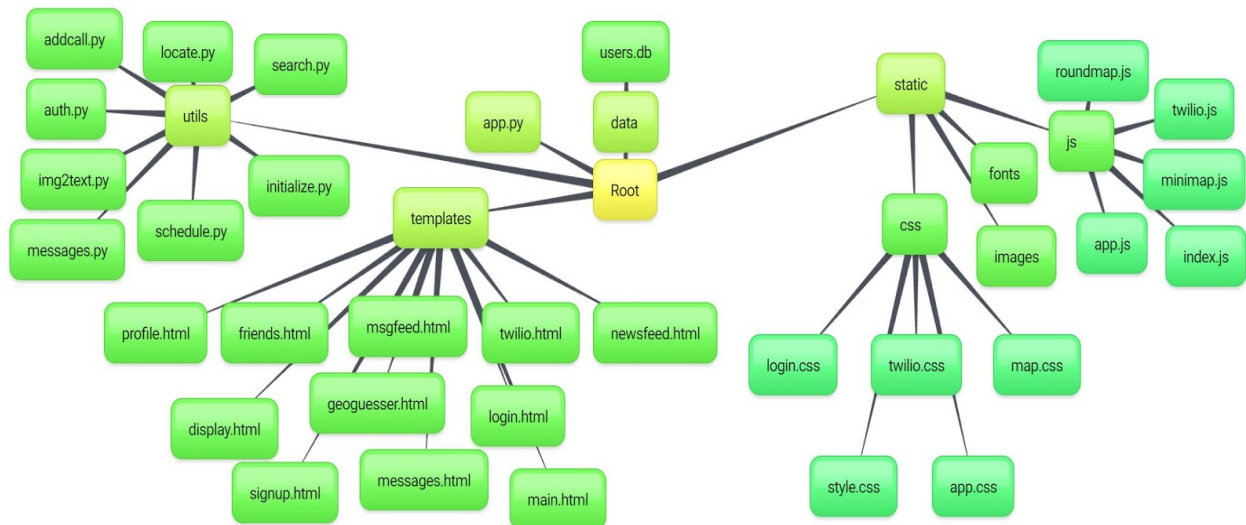| user1	user2	message	time
TEXT	TEXT	TEXT	TEXT

Site Map

created with www.bubbl.us

Component Map

created with www.bubbl.us

Components:

- maps.py: handles the various aspects of the project that center on the google maps api
- auth.py : used to authenticate and make accounts

- sched.py: does the majority of the work, in this file, based on given info (if the user has specified that they are at a location), the wherabouts of the user will be determined
- addcall.py: handles certain aspets of the video functionality, especially in regards to calling the twillio API.
- img2text.py: turns images into text using the slick OCR API
- initialize.py: sets the databases up, creates all nessecary tables
- locate.py: uses the maps API to locate users
- messages.py: used in the messaging functionaillity of the site
- schedule.py: corodinates and executes the various functionas that manipulate and alter user's schdules
- search.py: used in the search functionaillity of the site

Stages of Project:

Stage 1:
- Basic login and make account structure that uses data base
- Students can manually enter where they are, ie address, or a specific place in the school
- This info (where the person is) will be stored in the db and will be shown on the site
- The "leave" functionality--once a user leaves a venue, they alert the site that they are leaving (by means of some button clicking), and as a result the db will reset the current location to nothing
- Users can see all other users locations, these locations will be on the front page after you login

Stage 2:
- Students can add their current school schedules. Thus, when they have not entered their location, and the current time is during school hours, their location will be listed as their current class
- Users can explicitly search for certain other users whose whereabouts they would like to find

Stage 3:
- Using the google maps api, entry of the location no longer needs to be manual, either geolocation (not recommended), or using a "click" function on map (ie you click on a map where you are)
- Users can "follow" other users
- Users can deny "follows", from now on only users who follow another user can see that user's location

Stage 4:
- Replace the "follow" method with a "friend" method by requiring both sides to consent before information regarding whereabouts is made public.
- Implementation of some ground breaking CSS.

Stage 5:
- Profiles--users can create and maintain profiles using photos and the like
- Users most frequent locations are listed on their profiles

Stage 6 (If time permits it):
- Messaging function (message your friends to tell them that you are coming to them)
- Video chatting (talk with you friends in real time via video chat)
- Geoguessr game of most frequent locations inputted by users
- The potential harvesting of metadata (ie, the most and least popular places)
- A way to report abusive users

Time Table:

Approximate Due Date for the entire Project: Jan 20th

Stage	Due Date
1	1/9
2	1/11
3	1/14
MAJOR MILESTONE -This is the minimum project that we would be comfortable handing in -Up until this point, the project will be quite raw (lack of aesthetics, certain bugs)	1/14
4	1/17
5	1/19
DEBUG	1/20

Stage 6 is currently not part of the time table, if time permits it, and certain members of the team take things into their own hands, it could find its way into the final deliverable.