# Voltron // p01 // "Planner Project"

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Project Manager: Connor Oh

## **Necessary:**

Flask will serve as your web microframework.

Multiple supporting Python3 files will be used as necessary.

Bootstrap will be used as your front-end framework.

You will provide your own customized CSS where appropriate/necessary.

You will make *meaningful* use (sum > parts) of at least three (3) REST APIs, chosen from Ye Olde SoftDev API KB.

## **Required APIs:**

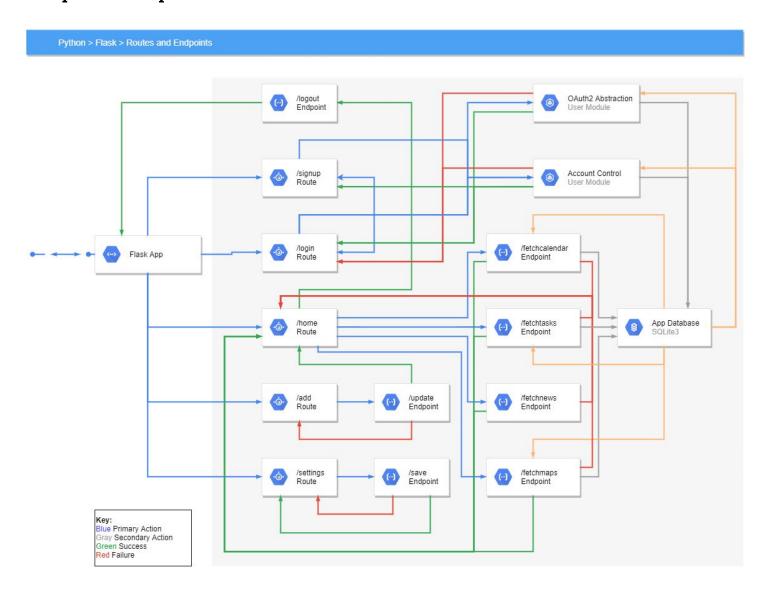
- Google Calendar API
  - See <a href="https://developers.google.com/calendar/v3/reference">https://developers.google.com/calendar/v3/reference</a>
- Google Tasks API
  - See https://developers.google.com/tasks/v1/reference
- Google Maps Embedded API
  - See https://developers.google.com/maps/documentation/embed/guide
- Reddit API
  - We are only using a very specific endpoint
  - Example:
    - https://www.reddit.com/r/worldnews/top.json?limit=5
    - Adding .json to the end of a url returns a subreddit's post(s) in JSON format
    - Adding ?limit=n returns n posts from the subreddit

#### **About/Features:**

- PERSONAL PLANNER WEBSITE
  - Calendar Events (Google Calendar API)
  - Tasks (Google Tasks API)
  - Displays the Current Traffic Information for Commute (Maps Embedded API)
  - News Feed (Reddit API)
- REGISTRATION
  - User should be able to provide a unique username, email, and password to create an account on the site
  - User should be able to login using his/her Google account in place of registering an account
- AFTER LOGIN
  - User should be able to access their account, provided they have already created one, using the same unique username and password
  - Edit/delete/add reminders
  - Personalize their "to do" list of tasks & scale them according to importance

- Display the tasks in the positions returned by the Task API
  - This is usually the importance of the task.
- View through news feed
- Set their home address and other locations that they commute to
- NOT LOGGED IN
  - Users can do nothing but stare at login/sign-up screen

#### **Components Map**



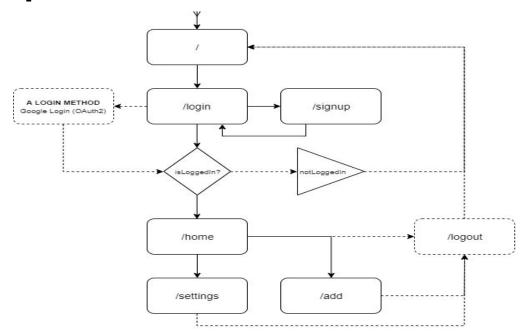
## A More Visual Component Map /login /signup Please Log In Please Sign Up Username Username A LOGIN METHOD Password Password Google Login (OAuth2) No account? Confirm Password Log In Sign Up -Have an account? Sign Up Log In ---; notLoggedIn Loggedin? /logout Log Out | WELCOME < name > Settings /settings Calender Settings Log Out Today's Date Today's Task Name: [ High Importance Reminders · Email Mr. Mykolyk Background Image: Study Medium Importance Dentist at 3:30 Lowest Importance Sleep add add /addtask TODAY'S NEWS ADD Log Out 1st Top Post from Reddit API 2nd Top Post from Reddit API Importance V add Today's Commute /addreminder Home • other: ADD Log Out End Work

add

#### **Website Pages**

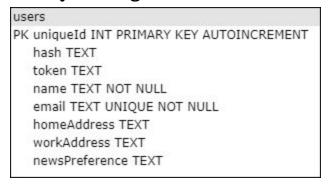
- LOGIN page
  - Enter username and password
    - IF new user logins THEN "this user does not exist"
    - IF existent user logins THEN routes to own blog
    - Routes to homepage
  - Register Button -> routes to register page
- REGISTER page
  - Enter username, email, and matching passwords
    - IF new user registers THEN routes to own blog
    - IF existent user registers THEN "this username is taken"
    - IF email is already used THEN "this email is used already"
    - IF passwords do not match THEN "passwords do not match"
    - Routes to login page
- HOME page
  - Buttons
    - Logout button -> routes to login page
    - Settings button -> routes to settings page
  - Shows list of reminders & "to do" tasks
  - Shows a news feed
  - Shows current traffic for commute
- SETTINGS page
  - Enables edit of home page setup
    - Involves editing and managing users database
    - Change background
    - Change homeAddress, workAddress, newsPreference
  - Personalize user's home page
- ADD page
  - Add a task or reminder

#### Site Map



NOTE: the dashed line show reroutes to routes that display nothing but instead do actions. The solid lines show reroutes to actual sites. Also, the line that goes from signup to login represents both the user going back to login or successfully signing up.

## **Database Layout Diagram**



- Each user will have his/her own unique Id using SQLite3 autoincrement function.
- Hash represents the password and salt string stored for each user.
  - Note that this field is not populated if the user uses Google Login
- Token represents the OAuth2 access token for Google Services.
- Name represents the name of the user.
  - May be obtained through Google Accounts.
- Email represents the email of the user.
  - May be obtained through Google Accounts.
- Home address represents the home address of the user that will be used in the Maps section.
- Work address works in a similar way to home address.
- News preference represents the preferred news provider for the user.
  - May not necessarily be implemented

#### Tasks & Roles

- Front-end Appearance and UI (*Leia Park & Connor Oh*)
  - Bootstrap
    - Login, Register, Home pages
- Back-end
  - Google (Jun Tao Lei)
    - OAuth2
    - Google API
      - Google Calendar API
      - Google Tasks API
        - Filter & personalization system
      - Google Maps Embedded API
  - Reddit API (Connor Oh)
    - No key necessary for pulling posts from subreddits
  - Users database (Leia Park)
    - Creation of database
    - Input to database from Login page
    - Accessing information from database (in order to login and register)
- Update design doc and devlog and facilitate workflow(Connor Oh)