



Active Alert Scheduler

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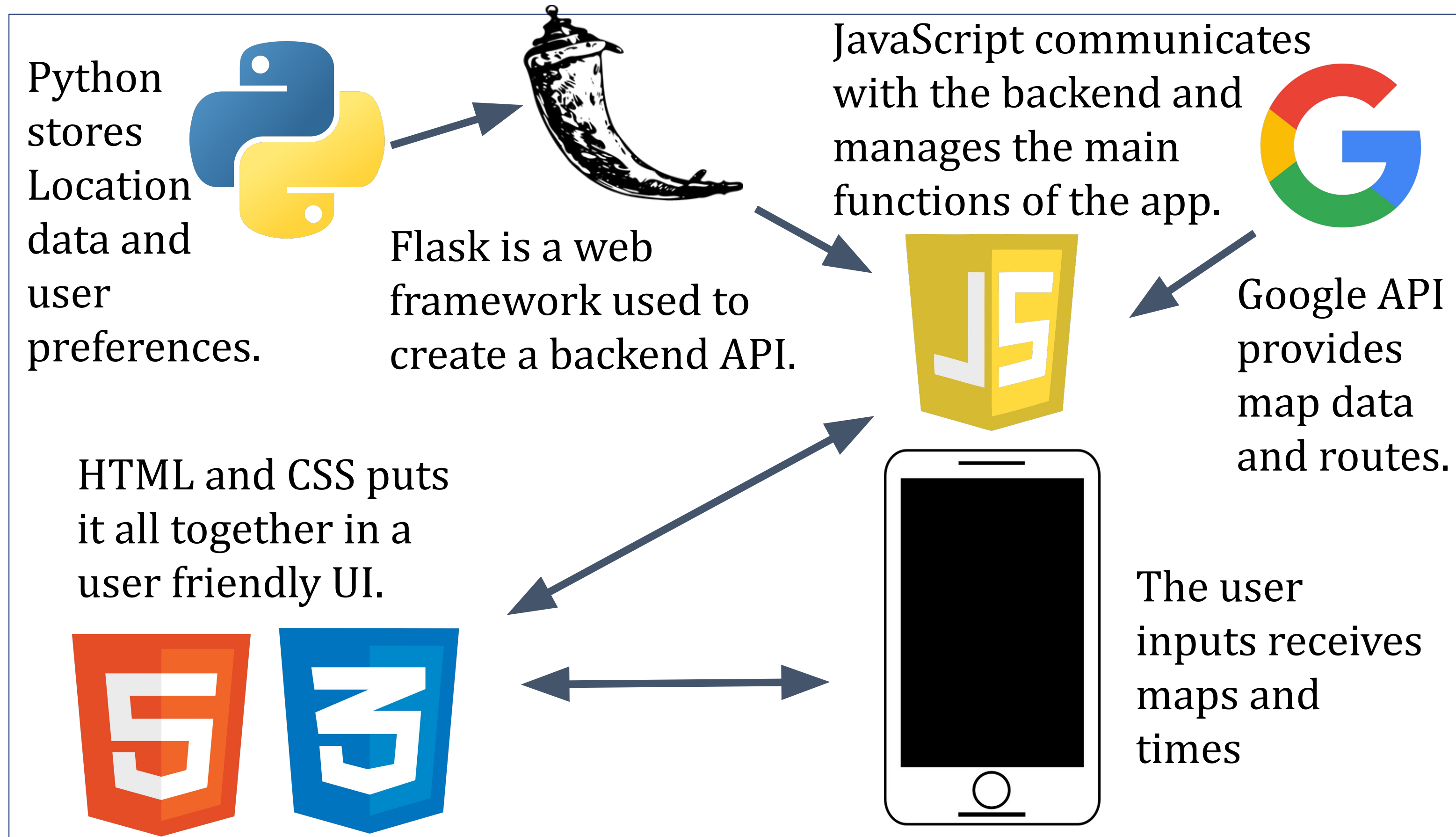
Overview

The Active Alert Scheduler is a scheduling and calendar app specially designed for use by UNH students. This is useful for students that have trouble or anxiety getting to classes on time. It will keep track of classes and alert a user when to leave based on where the user is relative to the destination, then automatically pulls up a map directing them to their next class.

Methodology

1. The user sets their classes and times.
2. The Active Alert Scheduler will automatically queue up directions to the next class. It uses the Google Maps API to get directions and estimated travel time.
3. The app uses Place IDs rather than names because they receive faster and more accurate results from the API. Names often give inaccurate locations on campus or are not sufficient for names of locations contained within other buildings.
4. The app will alert the user to start heading to their next class five minutes before they would need to leave to get to their class on time, based on the calculations from the API.

Application Architecture



Terminology

- **API**
An application programming interface is a system which allows applications to communicate with each other.
- **Place IDs**
Google Maps Place IDs are serial numbers applied to each location on Google Maps. Simply giving the Google Maps API the name of a location or even a full address, the API will need to translate that to an ID anyway, so giving the Place ID in the first place saves time and is more accurate

Google Maps API

- The Google Maps API gives map data such as routes and travel time.
- Data is fetched from the API using HTTP requests.
- It returns text in JSON format containing routes, travel time, etc..
- From there, the required information can simply be extracted for use in the application.

Goals

- Offer a more convenient way to keep track of classes.
- Reduce stress for new UNH students.
- Provide more accurate directions to locations on campus than Google Maps by using Place IDs from a pre-set list of common locations.

Results

- The app in its current form can show the path to the next class and give an alert when it is time to leave.
- It can only track a single day, it can't keep track of a week of classes.

Next Steps

- Adding the ability to configure additional days of the week.
- Improving mobile functionality.
- Expand the types of locations available. Not just educational buildings but also places to eat or do activities.
- Allow users to add addresses so that they are not confined to the premade list.
- Connect class names and section numbers so that putting in the schedule is unnecessary.