

# Planify Design Plan

## Initial System Design

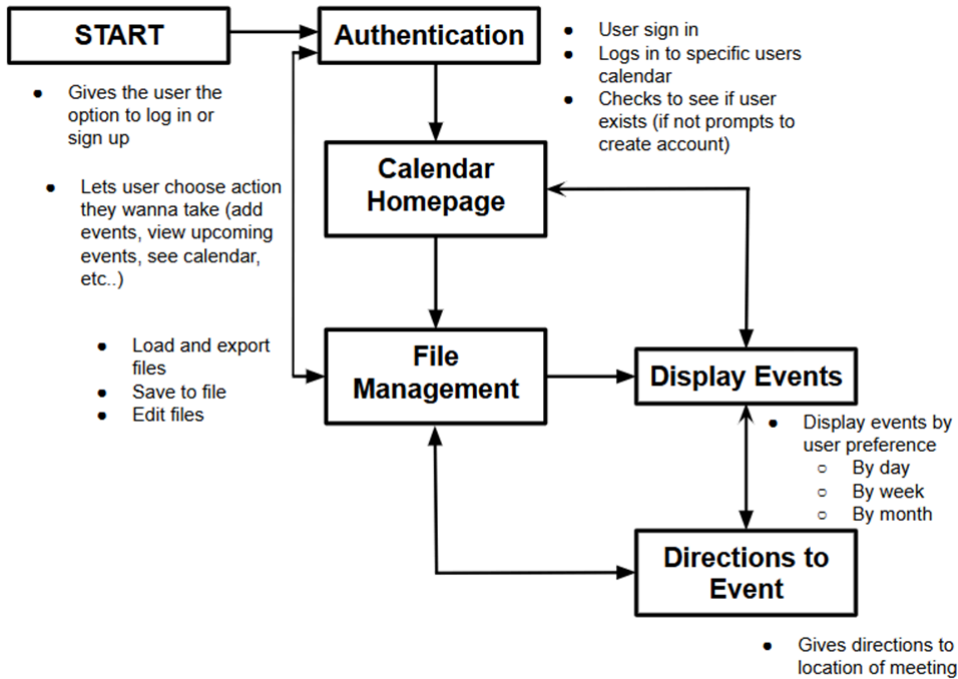
### Initial Technology Stack/Design Choice

To create this website, the key languages used are HTML, CSS, and Python. HTML and CSS are crucial languages because they are the easiest way to make a user interface. It is used by every developer and seemed like a no-brainer when we were brainstorming the application's front end. When it comes to the back end of our application, the language that was chosen was Python. Python was chosen because it is a language that is known by all members of the group. Alongside that, there are a lot of built-in libraries in Python that will enable us to create an effective product. The APIs discussed soon will also be easier to incorporate in Python. Regarding the framework, for the front-end side, we will be utilizing Bootstrap, a framework within CSS that contains website templates to make our website visually appealing. As for the backend, the framework that will be used is Flask, a popular, easy-to-use framework within Python that is used to help build web applications. With the help of these tools, it will be easier for us to make an appealing website that actually has functionality.

### Initial Data Design:

Many different APIs and databases will be utilized to assist with developing our code. Some APIs that will be used in the development of our software will be the Directions API as well as the GeoLocation API, available through Google Cloud Console, which, with the help of the Google Maps library available on Python, will allow us to give the user an accurate timeline regarding travel times to important meetings and other events that the user provides to the calendar. To deal with user authentication and storing specific information for each user, a database will have to be utilized, such as SQLite, which is Python-based and easy to learn and will ensure that all the information is secure.

## Initial Architecture Overview:



## Initial System Diagrams:

