

Development Document

Dashboard Interface

User Login

- Create Account using email address and password

- Save account to SQLite database

- Account recovery

- If the user does not remember their password, they can provide their email address and will be redirected to a password reset page.

Reports on Collected Data

Admin Dashboard

Employee Reports

- Shows where employees traveled, how many miles they traveled, and how long it took them.

- Allow administrator to export the report as a PDF

Modify Report

- Gives administrators the ability to manually override employee reports data.

GPS Tracking

Google Maps API

- Record traveled distance, start/end location, and start/end time

- Save to database and be accessible to administrators.

SQLite Database

User Login Information

- Store usernames and passwords of each user and whether this user is an administrator or not

User Mileage Data

Numerical Data

- Number of miles traveled

Non-numerical Data

-Location, date, and time

How to set up this web application – steps:

Install latest Django (5.1.3), Python (3.12), and PyCharm (2024.2.4) versions to your device

Create Django project in PyCharm IDE

Deploy Django development server

- Run the command in PyCharm: `python manage.py runserver`

Configure 'settings.py' in Django framework

- Change DEBUG feature to 'True'
- Enter the ALLOWED_HOSTS
- Generate a SECRET_KEY

Set up initial files for web view

- Create a view in 'views.py'
- Define a URL configuration in 'urls.py' to access the view in the browser

Create a templates directory in the Django project folder

- Add base.html, which is a template that serves as a base or layout for other templates (i.e. Dashboard, Login, and Signup pages).
- The views.py and urls.py files work together to handle requests and render the appropriate templates

Add Django's built-in SQLite database to store user data