

1 Introduction

I decided to use LaTeX instead of markdown to generate the documentation to brush up on my LaTeX skill.

2 Tech

2.1 Backend

For the backend, I used FastAPI as the main framework, with Pydantic as the data validation library.

2.2 Frontend

For the frontend, I used Vue.js as the main framework, with TailwindCSS for styling. Pinia was used for state management, with local storage for persistence. I also made the application into a Progressive Web App (PWA) using a Vite plugin.

3 Deployment

I used Docker to containerize the FastAPI backend, and deployed it on DigitalOcean. I spent lots of time trying to troubleshoot the deployment before realising a simple mistake: DigitalOcean required the port to be 8080.

I also learnt to be more mindful with dev vs production environment. Initially, my deployment worked and then it stopped working all of the sudden. This was because I forgot to update the CORS origins in my FastAPI backend to include the production URL (and other shenanigans regarding a '/').

4 How to run

4.1 Backend

Start by creating a virtual environment and installing the dependencies.

```
python -m venv venv
env\Scripts\Activate.ps1
pip install -r requirements.txt
```

Alternatively, you can use the latest version of the [Docker Image](#). Either ways, remember to set the environment variables for the Google Maps API key.

4.2 Frontend

Instal the dependencies and run the dev server.

```
npm i
npm run dev
```