Tony Nguyen

Dr. Shawn Bowers

CPSC 321

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Project Part 4

1. I have been working on completing the schema design. Based on the original version, several changes have been made:

* Removing flight statistic schemas: Instead of creating a table to save them, I will use SQL aggregation functions to calculate them using SQL's VIEW dynamically.
* Adding foreign keys to complete the relationships based on the ER diagram. I also made some changes to the schemas to ensure their normalization constraints.
* Populating some data to test the schema design.

A computer screen shot of a black screen

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1. On the backend side, I have been working on the API endpoints to support the features. I planned to use FlightRadar24 API at first, but then I realized they only offered it for enterprise use. With that, I looked for substitute options and found Flightera Flight Data as a perfect substitute. Since Flightera has a limit for the number of queries allowed to be made under the free tier, I will only use it when needed, meaning I will pre-populate the database with some dummy data to test the features.

* I am setting up a Flask app that runs on Python to handle the API endpoints.
* I also plan to complete the query functions to connect to the database and return the results to the front end within this week.
* I set up a Heroku app to host the backend API. I will update the API endpoints once I complete them.

A screenshot of a computer

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3. On the frontend side, I have been working on Appsmith to create the initial UI for the app. I have run into some issues with connecting it to the backend API, but I will try to resolve them within this week.

* I set up a Docker container to deploy the app. It is my first time setting up a Dockerfile from scratch, so I am still learning how to use it. I will update the Dockerfile once I complete it.

A screenshot of a map

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