Capstone 2 Project Proposal

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Plane Spotting Web Application

There are people who enjoy collecting items (stamps, coins, etc) and those that enjoy collecting memories / encounters (bird watchers, trainspotting, etc) and even some who enjoy plane spotting. Plane spotting is the collection of sightings of a particular aircraft at a particular location. A culture has evolved around plane spotting to support various activities like tracking famous peoples locations and noting change of activities like an increase in flights to Area 51. The users of this application will those that enjoy aviation and aviation activities and provide them the hobby of plane spotting.

I propose an application that allows users to keep a record of aircraft they have sighted. They would enter an aircraft's registration number and a photo and information about that aircraft would be returned from two aircraft database API's, (https://www.planespotters.net/photo/api and https://aviation-edge.com/developers). Then they would enter information about their sighting (date, location, activity, and other pertinent information which would stored in the application database and available to the user.

I will use Node and Express to develop a backend that will utilize PostgreSQL as the database to manage and store the plane sightings and user information. Node and React will be used as the frontend UI. I will create the API to manage the sighting data in the PostgreSQL database. The data about aircraft spotted will come from two API's and will include a photo of the aircraft and the following information:

- Aircraft basic: Name, model, registration number, IATA type code, ICAO24 hex code, IATA short and long.
- Historic data: Date of rollout, first flight, delivery and registration of aircraft.
- Production data: Construction number, production line, airplane series.
- Owner information: Owner of plane, airline IATA and ICAO code.
- Aircraft details: Classes, amount of engines, age of airplane and status.