Team Proposal and Charter

CSCI 3300 – 01

Group 3

1/27/23

Team Members:

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- Thang Vay
- Thomas McGuigan
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Proposal:

We are proposing a web application that can allow users to see flight information from different starting locations and different ending locations, as well as flexible dates. Using an API to gather information, we would send requests to get relevant data and sort it. The use of the API will provide the user with information regarding multiple flights from a location that they select. This project will also include a database that holds accounts, preferences, and certain saved flights. We will be using a min-heap as our main data structure. There will be a user interface, a backend that interacts with an external API, and a database. The full scope of this project includes research into web development frameworks, software design, implementations, and testings. Everyone will create deliverables and participate in sprint planning.

Communication:

Team members have created a text group chat and set up weekly meetings at 1pm on Fridays.

Scrum Master:

Rhett Schlabach will be the scrum master.

Programming Languages:

The languages that we will be using include HTML, CSS, SQL, JavaScript (React.js), and Python

Requirements: 2/3/23

- 1.0 The user shall have access to a field through which to enter flight information.
    - 1.1 The user shall select the type of flight desired.
        - 1.11 The user shall be able to select a one-way flight.
        - 1.12 The user shall be able to select a round-trip flight.
        - 1.13 The user shall be able to select a multi-city flight.
    - 1.2 The user shall select the departure location of the flight.
        - 1.21 The user shall be able to select one departure airport manually.
        - 1.22 The user shall be able to select multiple possible departure airports manually.
        - 1.23 The user shall be able to select one or more departure airports from saved presets attached to the user account.
    - 1.3 The user shall select the departure date of the flight.
        - 1.31 The user shall be able to specify a range of departure dates for flights.
    - 1.4 The user shall select the arrival location of the flight.
        - 1.41 The user shall be able to select one arrival airport manually.
        - 1.42 The user shall be able to select multiple possible arrival airports manually.
        - 1.43 The user shall be able to select one or more arrival airports from saved presets attached to the user account.
    - 1.5 The user shall select the departure date of the return flight.
        - 1.51 The user shall be able to specify a range of departure dates for return flights.
    - 1.6 The user shall be able to input the number of travelers for which seats need to be located.
    - 1.7 The user shall be able to select the cabin class desired for the flights.
        - 1.71 The user shall be able to select one cabin class manually.
        - 1.72 The user shall be able to select multiple cabin classes manually.
        - 1.73 The user shall be able to select saved cabin class presets attached to the user account.

- 2.0 The software will present flights available based on the information entered by the user.
    - 2.1 The flights will be presented in order from lowest to highest prices.
    - 2.2 The user shall have access to the itinerary of flights necessary to connect the departure location to the arrival location.
        - 2.22 The itinerary will display the flight time of each flight.
        - 2.23 The itinerary will display the layover time of each flight.
    - 2.3 The user will be provided with a link to the appropriate airline website through which the desired ticket can be booked.
- 3.0 The user will be able to create a username and password to save flight information
    - 3.1 The software shall read saved favorite locations from the database.
    - 3.2 The software shall write new saved locations to the database.
    - 3.3 The user will be able to access their saved locations.
    - 3.4 The user shall be able to modify their saved locations.
- 4.0 The web client shall have a search bar to get users' input.
    - 4.1 The search bar shall let the user enter information about their departure location.
    - 4.2 The search bar shall let the user enter information about their destination location.
- 5.0 The web client shall have a calendar interface through which the user can toggle their departure and/or return dates.