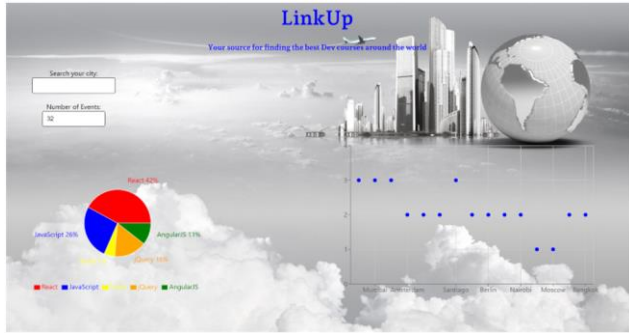# Case Study for Meet App "LinkUp"

Overview~

Meet app is a serverless, progressive web application (PWA) with React using a test-driven development (TDD) technique. The application uses the Google Calendar API to fetch upcoming events.

Purpose and Context~

- Meet App is a personal project I have built as part of my CareerFoundry curriculum to demonstrate Test Driven Development (TDD) on a serverless, progressive web application (PWA).
- Serverless and PWAs have grown in popularity over the last few years, and they're both considered to be the future of web development. By combining these two concepts, the app will not only work as a normal web application, but it will also reap the benefits of both serverless architecture and PWAs:
  - Serverless: No backend maintenance, easy to scale, always available, no cost for idle time.
  - PWAs: Instant loading, offline support, push notifications, "add to home screen" prompt, responsive design, and cross-platform compatibility

Objective~

The objective of the project was to learn and implement test driven development (TDD) for creation of a serverless, progressive web application to showcase in my personal portfolio. The problem I wanted to solve was creating tests through user stories that drive the development process of the application.

TDD is based off Agile Methodology User Stories to incorporate all of the application's necessary features, which drives the development of the PWA. LinkUp utilized Google Calendar API for events and AWS Lambda functions for its serverless hosting (SaaS).

1 User Story~

Feature 1: Filter events by city. As a user, I want to be able to filter events based on my location so I can decide what event I want to attend.

- Scenario 1: When a user hasn't searched for a city, show upcoming events from all cities.

    - Given the user hasn't searched for any city.
    - When the user opens the app.
    - Then the user should see a list of all upcoming events.

Challenges~

The challenges I faced during this project were mainly setting up the OAuth Consumer in the Google console. There were quite a few boxes that had to be filled out with certain information and at one point, I missed a step which caused a setback. I also had an issue in my api component when I transitioned from the mock data for local testing, to the data pulled from the api. After days of trying to find my issue, I employed the help of my tutor, Adam Pagels, and the coding error was corrected.

Duration~

The project took me about twice as long as I had hoped it would due to the challenges listed above. However, I feel like I learned more while working through the issues.

Credits~

Role: Sole Developer

Tutor: Adam Pagels

Links~

evandersloot.github.io/meet-app/

https://github.com/evandersloot/meet-app