"Ebay" Project Outline

Problem Statement

When a group of friends in a group chat decide to do something, there is no quick and convenient way for them to organize the outing. "Event Bay," or "Ebay" for short, is a Progressive Web App which aims to organize impromptu meetups without the hassle of creating Facebook Events. The three main features Ebay will provide are as follows:

1. Ability to sign in via OAuth to common services such as Google, Facebook, etc. This will make authentication very quick and convenient.
2. Linkable events will allow users without accounts to view event details and quickly sign up to RSVP.
3. Ebay will be a Progressive Web App, which will allow users to view the app from their browser or add it to their home screen for quicker access.

Audience

Ebay's target audience ranges from all ages. We specifically intend to target high schoolers and college students because of their high usage of social media and the vast amount of friends they tend to have during that age. Our target audience will initially be people living in the U.S. because that is where we live and then we intend to expand this app to the rest of the world.

Functionalities

In accordance with Ebay's mission to provide a seamless and easy way for friends to organize events, the following functionality will be integral to the app.

- Create an account
  - Name
  - Phone number
  - Email
  - RSVPed events
- Login into account
  - OAuth
  - Phone number
- Create an event
  - Date
  - Time
  - Location
  - RSVP List
  - Title

- - - Description
  - Event detail page
    - - Show details
    - Edit event (if account is event host)
    - RSVP to event (if signed in)
  - Account detail page
    - - Edit account (if the account is yours)
    - Show events that account is going to
  - Administrator account
    - - Remove people from events
    - Remove events
    - Remove users

Technologies Used

Frontend. The Event Bay frontend will be created using the Angular Framework. We chose this technology because it is a common frontend used in industry and it has extensive support for PWAs.

Backend. Our backend will be a REST API created using the Express Node library. This will enable us to use a common language between frontend and backend.

Database. MongoDB is a NoSQL database which Node has great support for. A NoSQL database will provide us with the advantage of having a consistent data model between runtime and database.

Authentication. Auth0 is an extensive authentication service which will allow passwordless authentication via text verification as well as OAuth integration through Google and other platforms.