**GasMate**

**Project Description**

* What will your app do?
  + GasMate is designed to help users find the cheapest gas prices near their location quickly and efficiently. By leveraging real-time data and user-friendly mobile technologies, GasMate provides up-to-date information that helps drivers save money on fuel.
* What are the main features or functions?
  + Dynamic Map View: Shows nearby gas stations and current prices on a map.
  + List View: Provides a detailed list of nearby gas stations with prices and additional information like distance and brand.
  + Gas Station Detail View: Offers comprehensive details about a specific gas station, including amenities, services, and user reviews.
  + Price Alert Setup: Allows users to set up customized alerts for gas price changes based on specific criteria such as price thresholds and location radius.
* Discuss how your final project will apply or demonstrate the topics & technologies you researched.
  + The app will utilize several iOS technologies such as Core Location for accessing the user's geographic location, MapKit for integrating and displaying maps, and local notifications for alerting users about price updates. These technologies are pivotal in developing an app that requires real-time data and location services. Additionally, the project will apply UX/UI design principles to ensure the app is accessible, intuitive, and engaging for users.

**Preliminary Screen Design**

* Screen 1: Home Screen (Map View)
  + Description: This is the main view where users first interact with the app. It displays a map centered on the user's current location with pins marking nearby gas stations. Prices are visible when a pin is tapped upon, and there is a search bar for location searches and a filter button.
* Screen 2: List View Screen
  + Description: Provides a scrollable list of nearby gas stations sorted by price or distance. Each entry shows the price, distance from the current location, and a brand logo. There is a button for more details and navigation.
* Screen 3: Gas Station Detail Screen
  + Description: Displays detailed information about a selected gas station, including services, operational hours, and an option to set price alerts. Users can also navigate to the station or add it to their favorites.
* Screen 4: Price Alert Setup Screen
  + Description: Allows users to set alerts for specific gas prices. They can choose the station, set a price threshold, and select notification preferences.

