

MAP - E

[Video](#) | [Github](#) | [Figma](#)



Designed & Developed by
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Map

By default, the app shows a map **with charging stations near the user's current location**. The map is retrieved from Maps SDK, and the charging station locations are retrieved from Places SDK.

Charging Stations

The locations of charging stations are indicated by **colored pins** on the map:

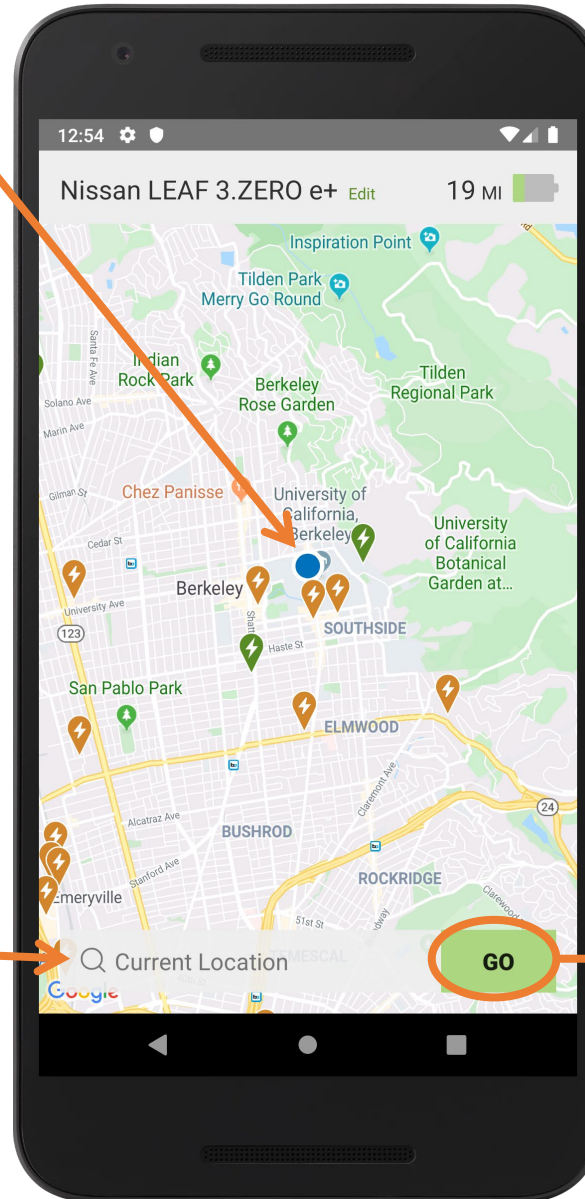
Green: 3 cheapest stations

Orange: Regular station

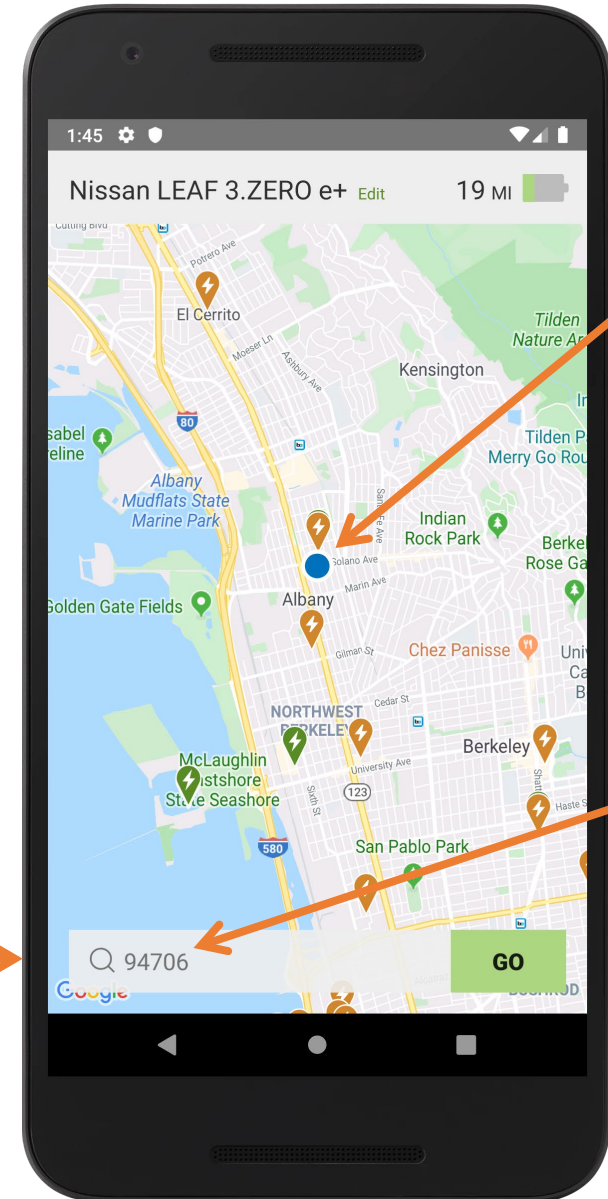
Search by Zip Code or Address

Users can search for charging stations by zip code or address by entering it into the textbox and clicking Go. Using Google Geocoding API, the app gets the latitude and longitude and **updates the map to the new location**.

Current Location



Zip Code Location



Zip Code Entered by User

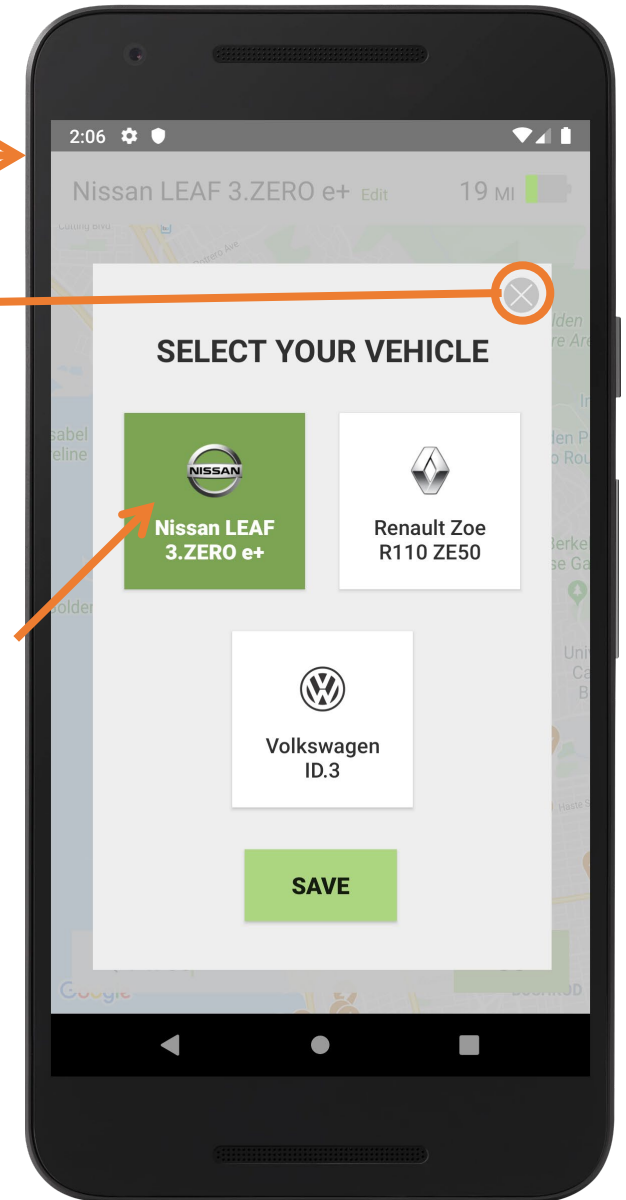
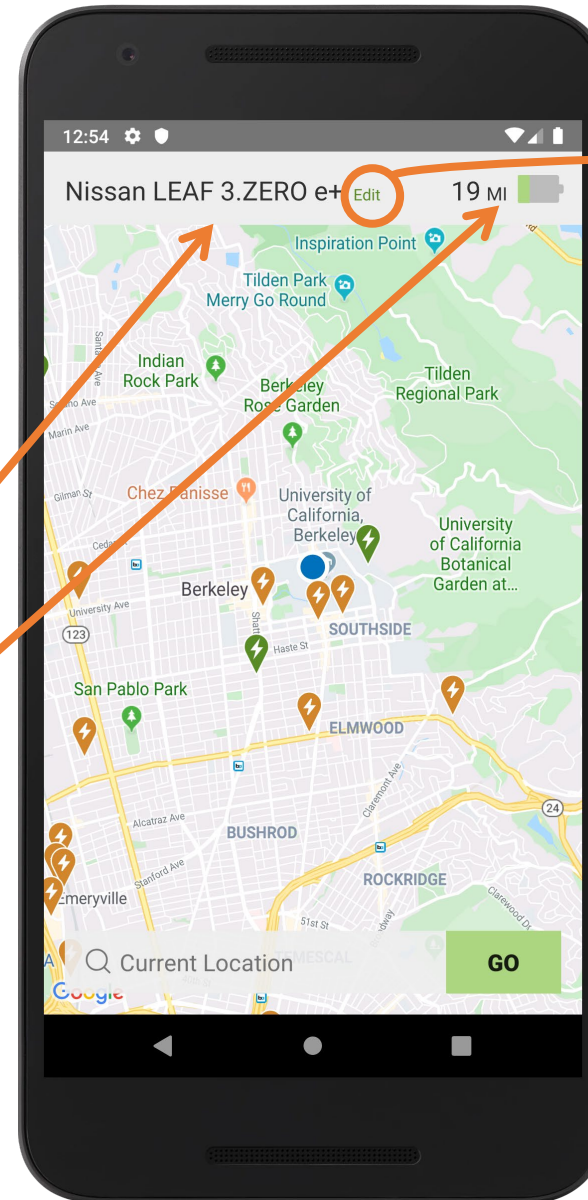
Car and Battery

Type of Car

The type of car that the app is currently set to is shown at the top of the screen. Clicking Edit will open a popup where users can change the type of car.

Battery Level

The battery level of the car is shown visually for quick recognition and in miles for interpretability.



Selected Car
(in green)

Selecting a Station

Users can select a station by clicking on the corresponding pin on the map. When doing so, information about the selected station is retrieved using Places SDK or custom calculations and shown at the bottom of the screen, such as:

Location

- Address (Places SDK)
- Minutes it takes to drive there (calculated based on distance)

Availability

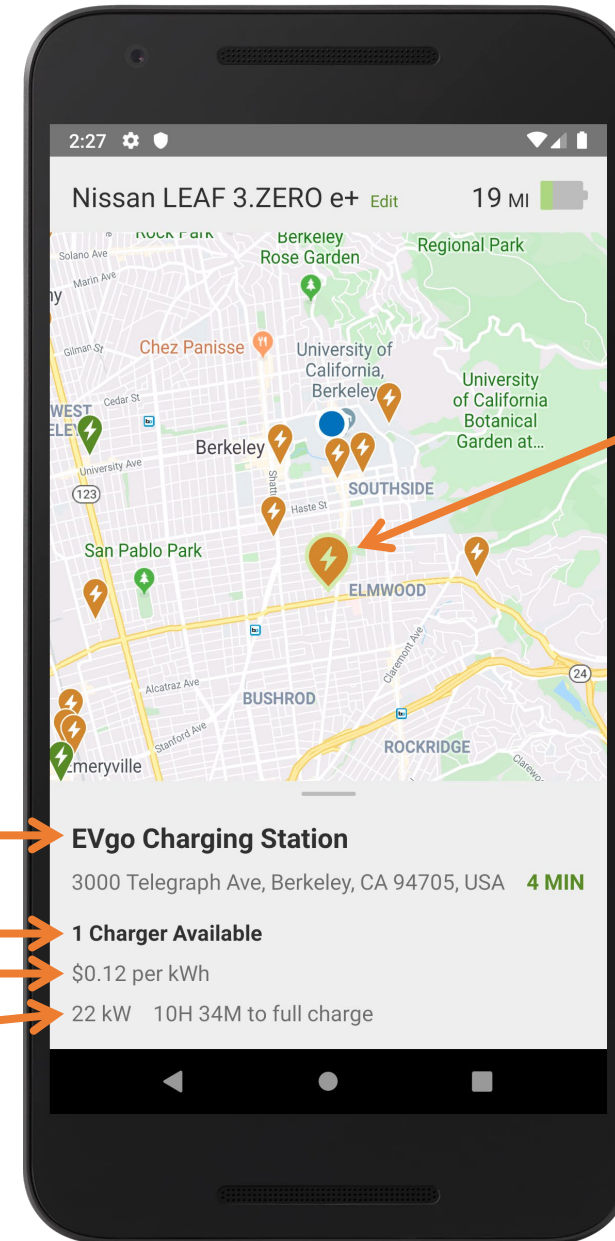
- Number of chargers currently available. Shown in **red** if none available. (Based on open hours from Places SDK as well as some randomization)

Price

- Price per kilowatt-hour (randomized)

Duration

- How long it would take to completely charge the car given the kilowattage of the charger (calculated based on actual specs of selected car)

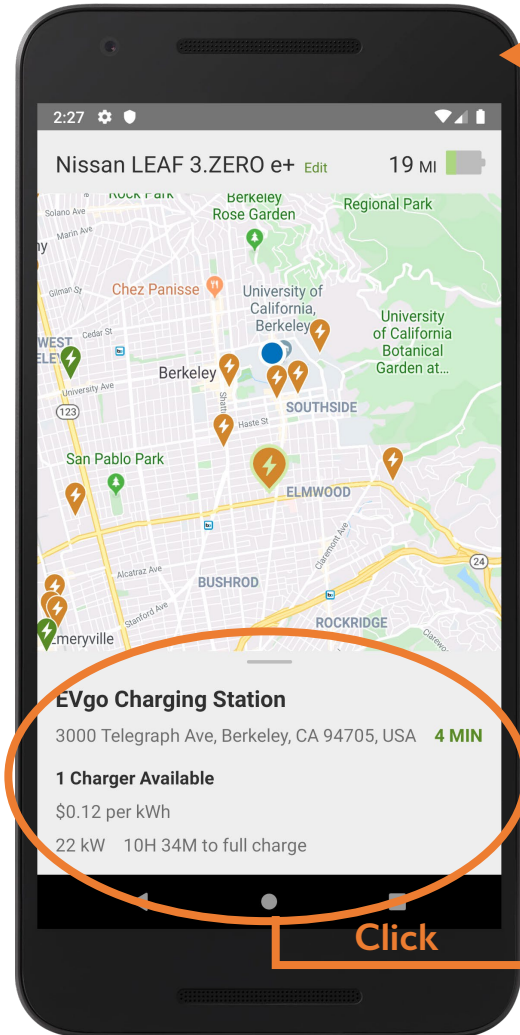


Selected Station
The selected station pin is larger than the rest so users can quickly distinguish it from the other stations on the map.

Charging Station Details

To view more details about the station, **users can scroll down the page**. I purposefully cut off some text at the bottom of the screen to suggest to users that they can scroll for more. These additional details include (hard-coded):

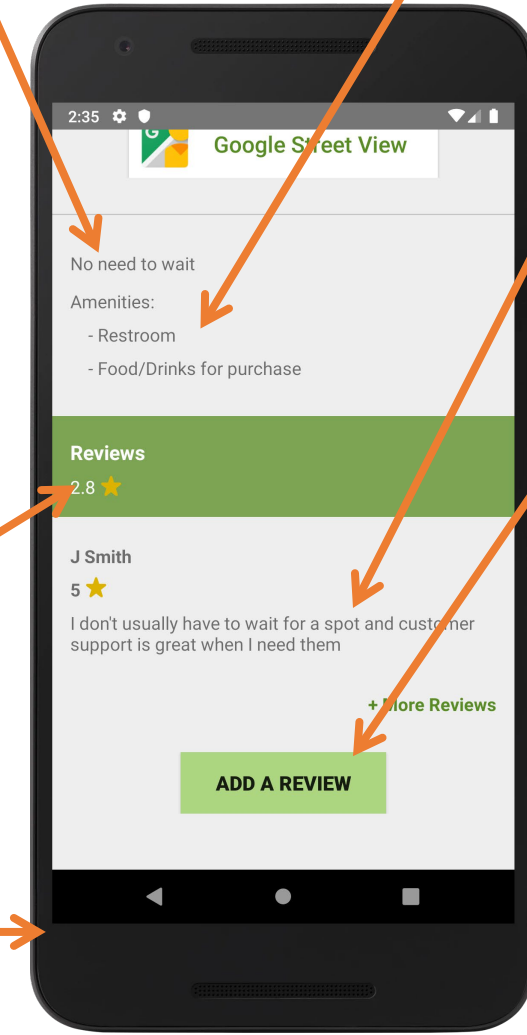
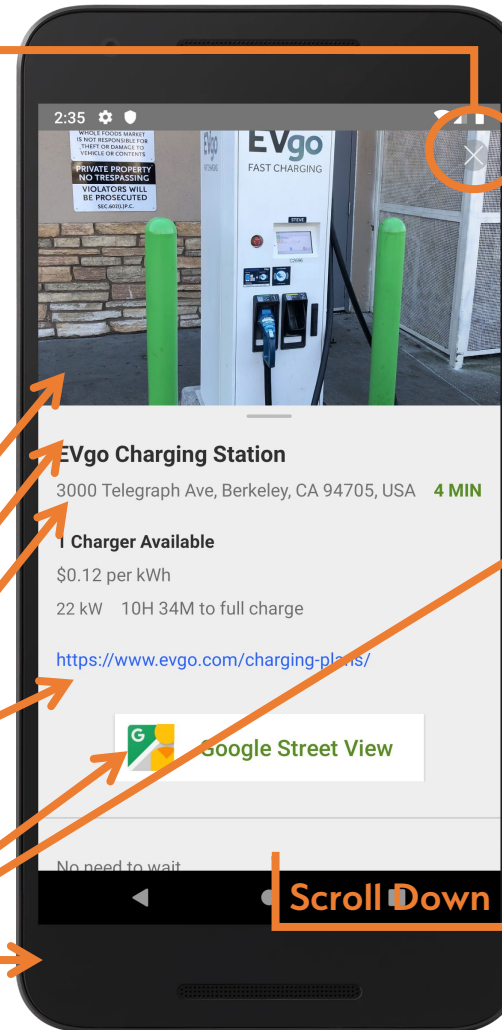
- **Current wait time**
- **Amenities**
- **Reviews**



To see the Charging Station View, users can click anywhere in the box with the selected station info.

The Charging Station View shows **info about the selected station taken from Places SDK and Maps SDK**, such as:

- **Picture**
- **Station Name**
- **Address**
- **Website**
- **Google Street View**
- **Average Rating**



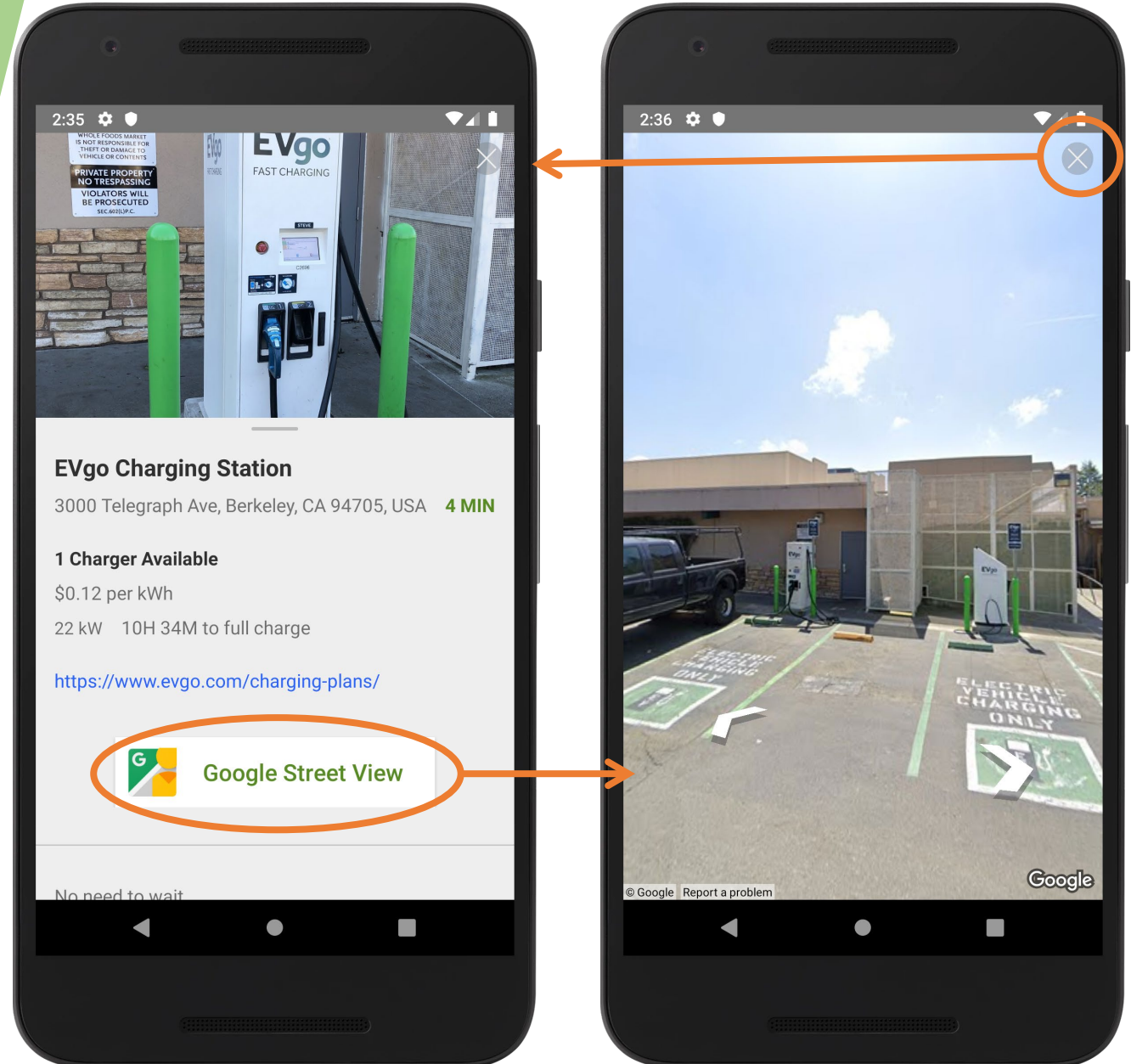
Add a Review

To rate/review a charging station, users can click on Add a Review from the Detailed View (not functional)

Google Street View

Users can see the Google Street View of the charging station by clicking on the **Google Street View** button. Google Street View is implemented using Maps SDK.

To exit Google Street View, users can click on the **X button** in the upper right corner.



URLS

Video

<https://drive.google.com/file/d/1iLFN2HuWPpQ1Cg7oZwDQuzTvFT6BMwAa/view?usp=sharing>

Github

<https://github.com/cs160-berkeley/prog02b-fa19-aoneale>

Figma

<https://www.figma.com/file/fChs1t4r25lYhonoCCTKbv/Prog-2?node-id=0%3A1>