System

The application Locate a socket provides is to locate electric vehicle charging stations. The user can locate a charging station near their location and book a slot if they want. Charging station providers can also post their charging station location and other features in this application.

Objective

The application helps to find the nearest charging station. So that the user can travel without any tension, and they can plan their trips. Also, the charging station providers can provide the station details, and they will get money online. So they can run their business very easily. The application helps the user to find the free charging slots and they can book the time slot for charging.

Preconditions

- The user needs to check whether the browser supports or not for the application
- The user needs to give location access to the application

Actors

Primary User 1: The users who search for the location

Primary User 2: Charging Station providers.

Basic Flow

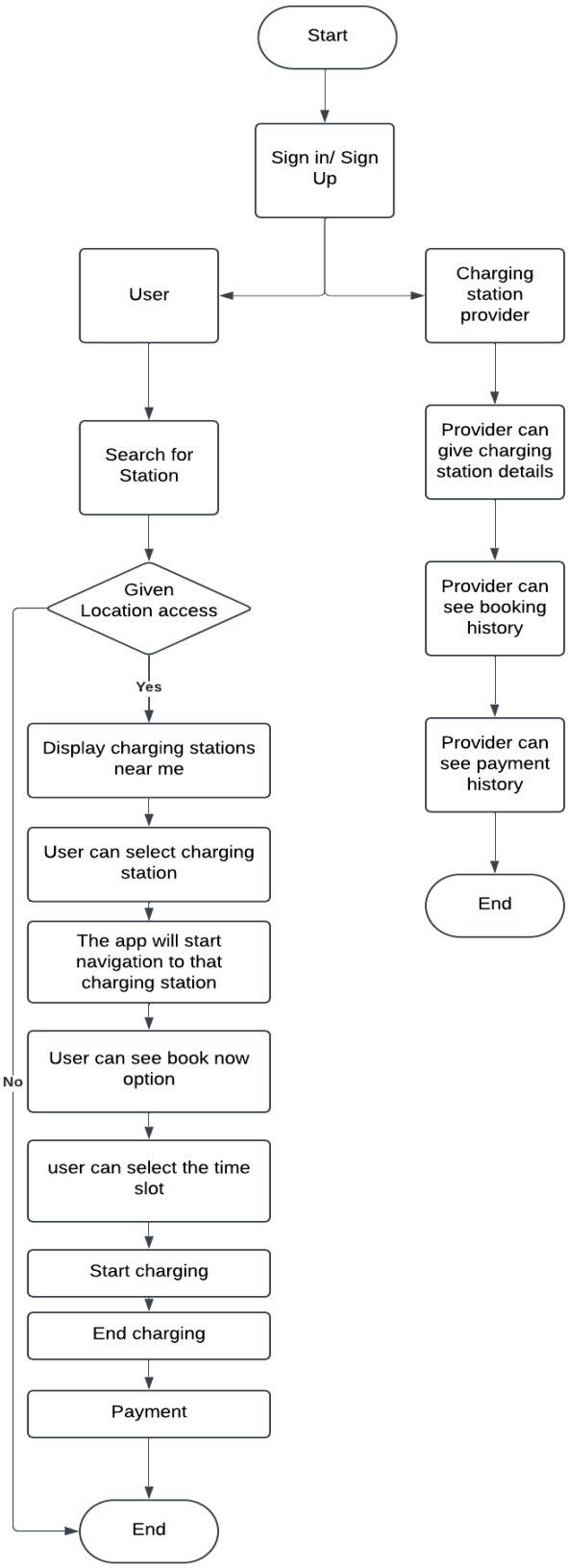
Primary user 1

1. The user opens the application
2. The user can click on the search location on the application
3. The application asks for permission for the GPS location
4. If it is yes application will search for the charging stations near that location.
5. If it is no user will not get any charging station location.
6. After seeing the charging stations on the map, the user can select the charging station to which they want to go.
7. The app will start navigation to that charging station
8. The app will show the Book Now option
9. If they click on book now it will show the time slot and they can book the slot
10. After the user reaches the station they can start and end the charging.
11. The next step is to make the payment.

Primary user 2

1. The user opens the application
2. The user can sign in or sign up
3. The user can enter their charging station details.
4. If the user already given charging station details they can see the charging station booking, payment history and reviews.

Diagram


Start
Sign in/ Sign Up
User
Charging station provider
Search for Station
Provider can give charging station details
Given Location access
Provider can see booking history
Yes
Display charging stations near me
Provider can see payment history
User can select charging station
End
The app will start navigation to that charging station
User can see book now option
No
user can select the time slot
Start charging
End charging
Payment
End

User Stories

1. Users want to search for the nearest charging stations. So the user can find the nearest charging station.
2. Users want to view the availability of charging stations. So the user can plan the trip accordingly.
3. The user can book the charging slot in advance. So the user can avoid waiting for the charging station.
4. Users can take the route with EV stations. So the user can take the route with EV stations for their trip.
5. User can complete transactions from their phone. So the user does not need to keep the change.
6. Charging station providers can update the availability and price of their charging stations, so users can view the opening and closing times. Additionally, charging station providers can view bookings and payments.
7. Charging station providers can track the customer feedback. So the charging station provider can improve their service.