



ELECTRIC VEHICLE RECHARGE AT NEAREST BUNK USING WEB APPLICATION

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1. Implementation:

We come up with the idea to design an Electric vehicle recharge at the nearest bunk station using a web application that facilitates a pleasing experience for the user with its unique features. In this section, we discuss the implementation to complete our project. Our team searched for a variety of references related and some linked with the app then sorted out the references that are together to pick references that are related to the purpose of this paper. The search method is carried out by referring to related keywords and sorting methods are completed by studying the discussion topics from each reference and choosing which may be used for the process. After filtration, we started to create ideas and designs for developing this app. Our team has started developing the app by combing ideas from selected references and applying them in order as per the need of our project. Our application contains a navigation system, slot booking, profile management user and vendor, online payment system, real-time availability of electric vehicle charging stations, and the addition of new stations. Below is the basic function a user and admin can do.

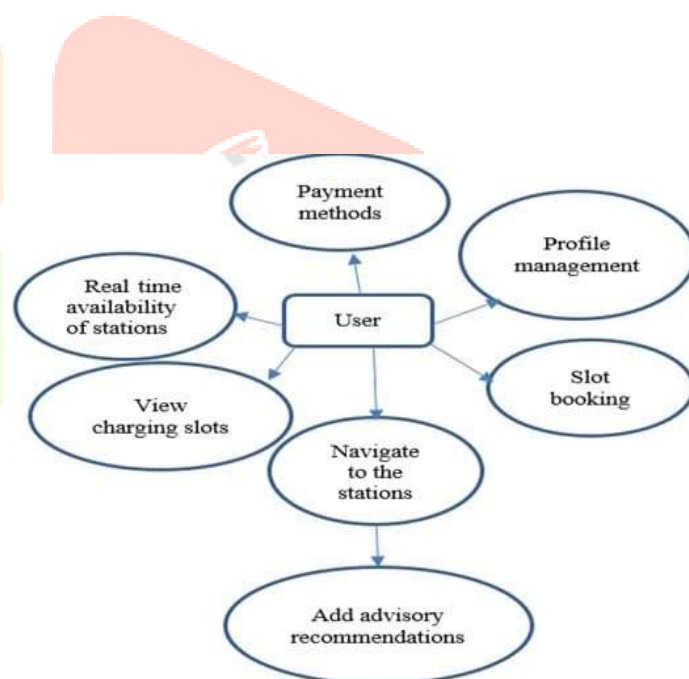


Fig 1.1 User Features

Users can interact with:

- Profile management
- Can Book Slot
- Map and navigate
- Add advisory recommendations
- View charging slots
- Real-time availability of stations
- Payment Methods

2. Snapshots

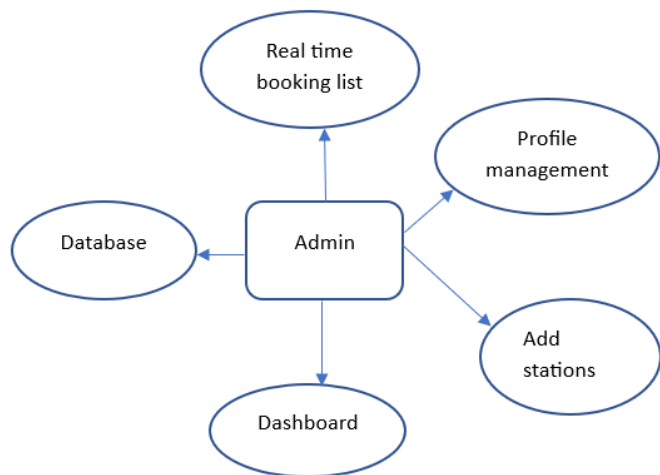


Fig 1.2 Admin Features

On opening the app first we have to choose the user (Electric vehicle owner) or vendor (Electric vehicle charging station owner) and have to log in already register or sign up if not.

1.1 User

a. Profile management:

This feature helps the user create his/her profile and vehicle details.

b. Slot Booking:

On clicking the book slot this activity opens. This activity has booking details to be filled in to book a slot.

c. Navigation Feature:

This feature is to navigate the user directly to the station from the user's current location. This opens google maps and directly starts the turn-by-turn maps activity of google maps.

d. Add advisory recommendations:

The user can add advisory recommendations about the stations which he visited.

e. Payment methods:

Users can pay the amount through this application and earn credit points.

1.2 Vendor

View the booking history.

1.3 Admin

a. Real-time booking list:

This activity has data on all users booking details at the charging stations

b. Profile management:

Admin can manage the profiles of both user and vendor.

c. Add stations:

Admin adds new stations which are active to the application

d. Dashboard:

Admin does control the dashboard which contains adding and controlling the features.

e. Database:

It contains the database of stations, advisory recommendations, vehicle and battery data, and slot booking.

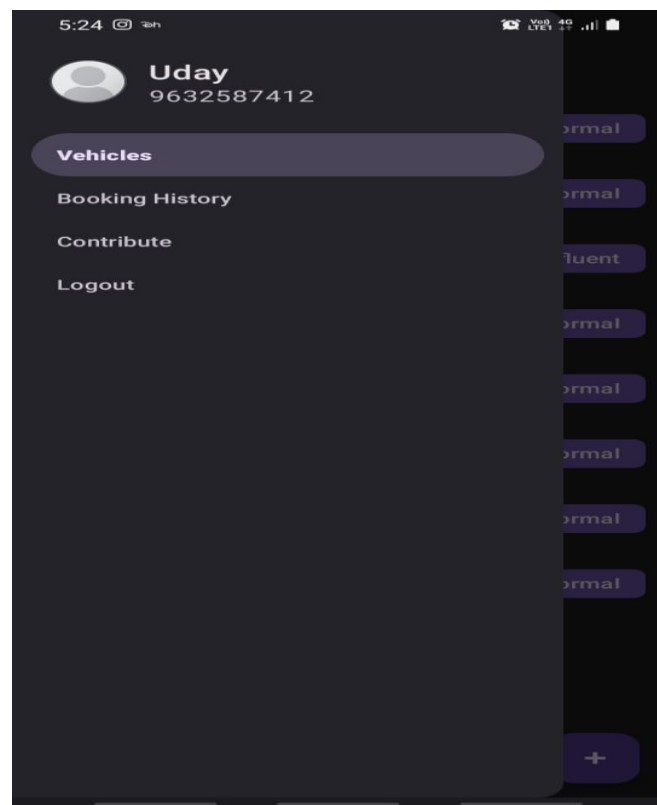


Fig 2.1 User Profile

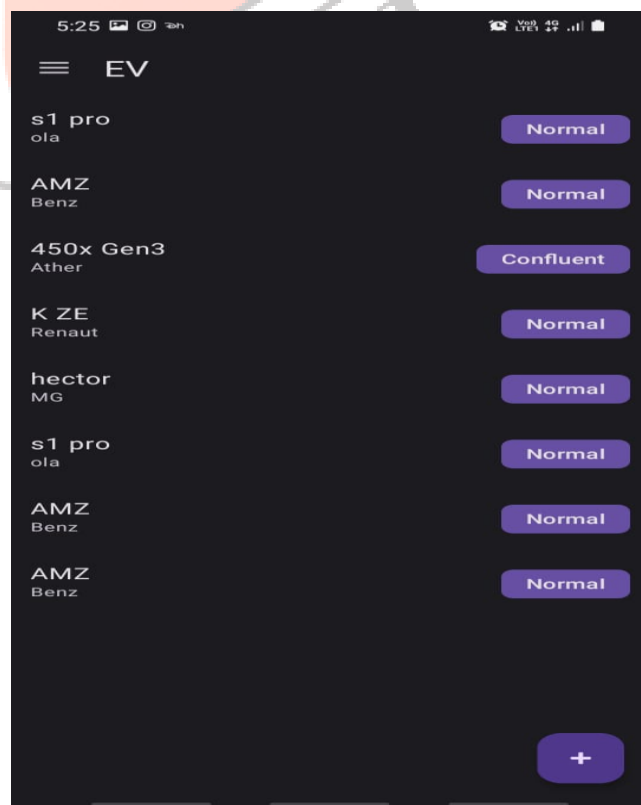


Fig 2.2 Adding Vehicle

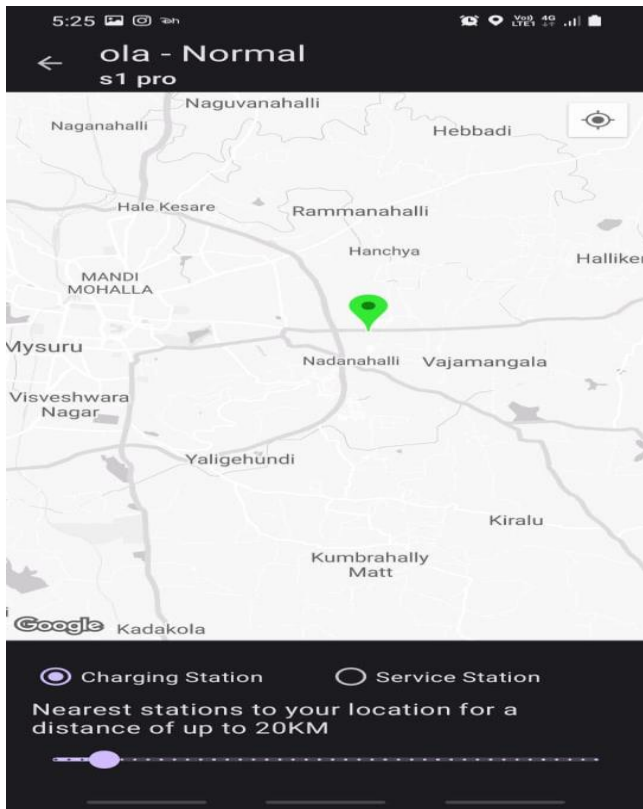


Fig 2.3 Real-time availability of stations

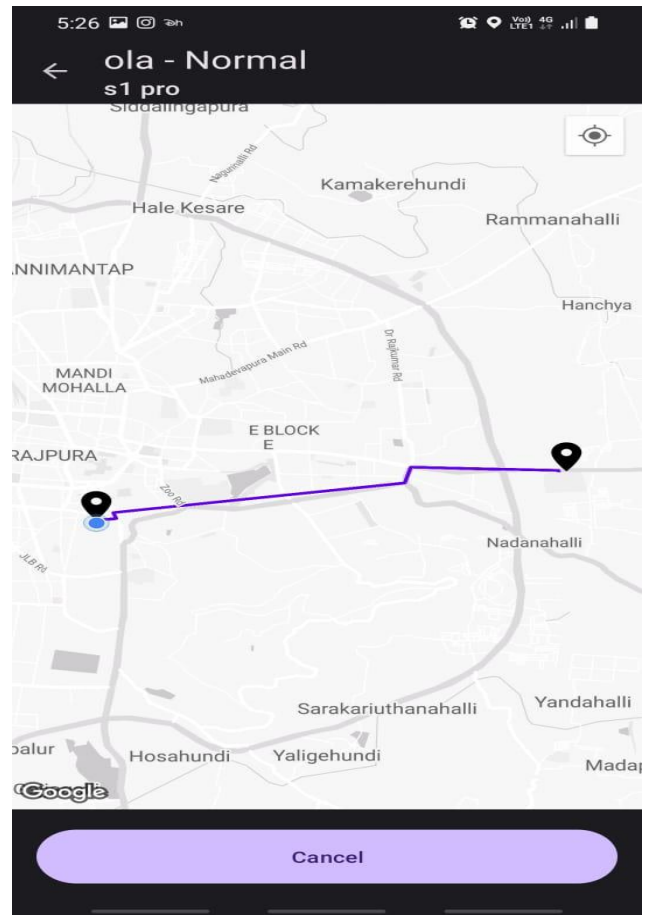


Fig 2.5 Navigation

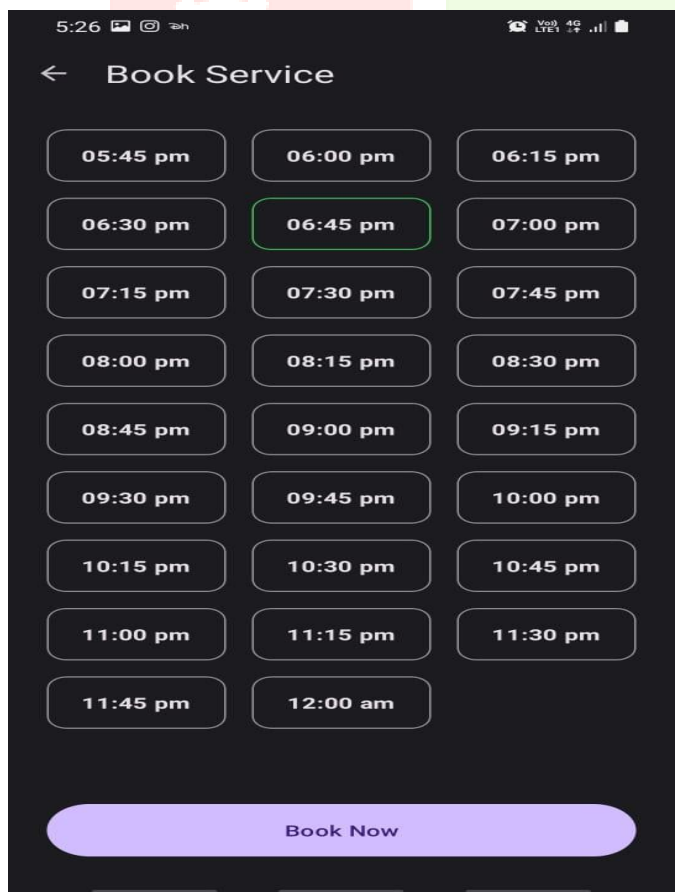


Fig 2.4 Slot Booking

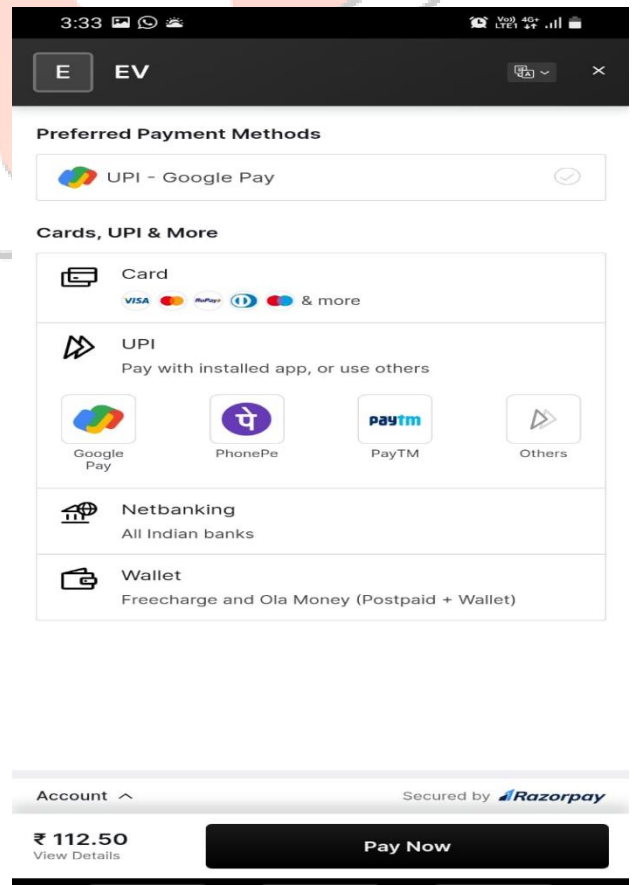


Fig 2.6 Payment

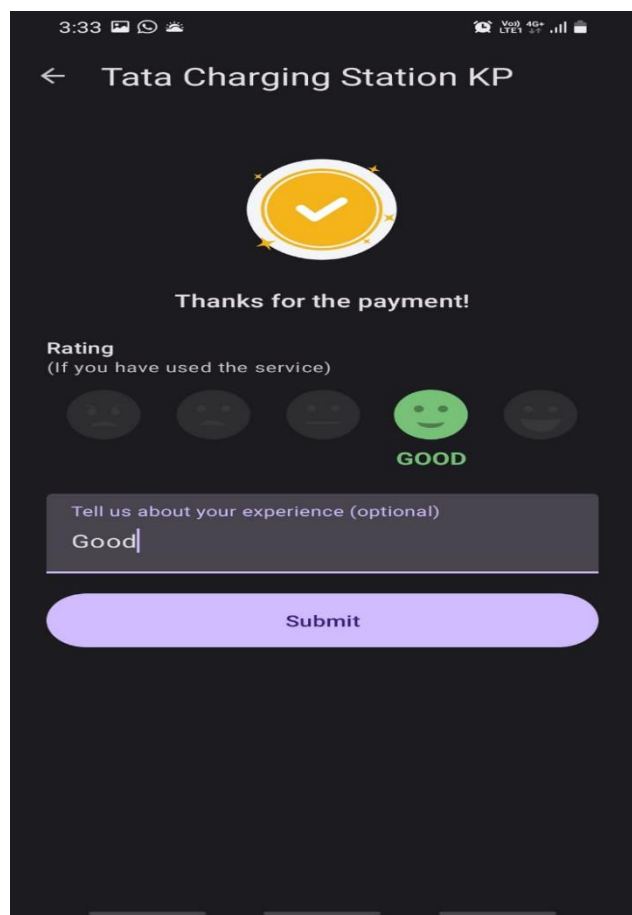


Fig 2.7 Advisory recommendations

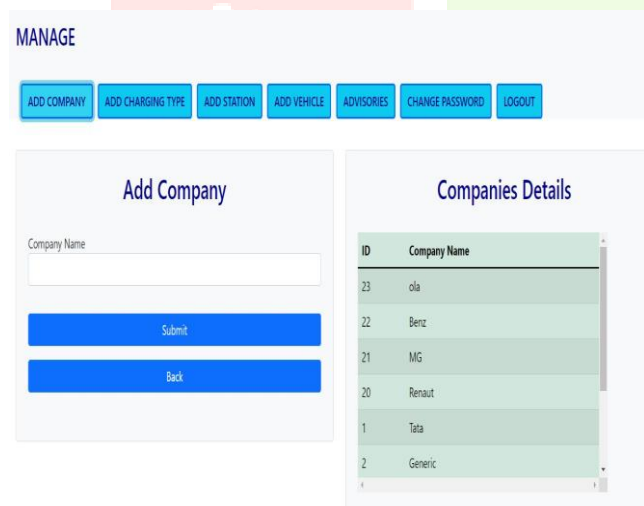


Fig 2.8 Admin Dashboard

3. References:

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