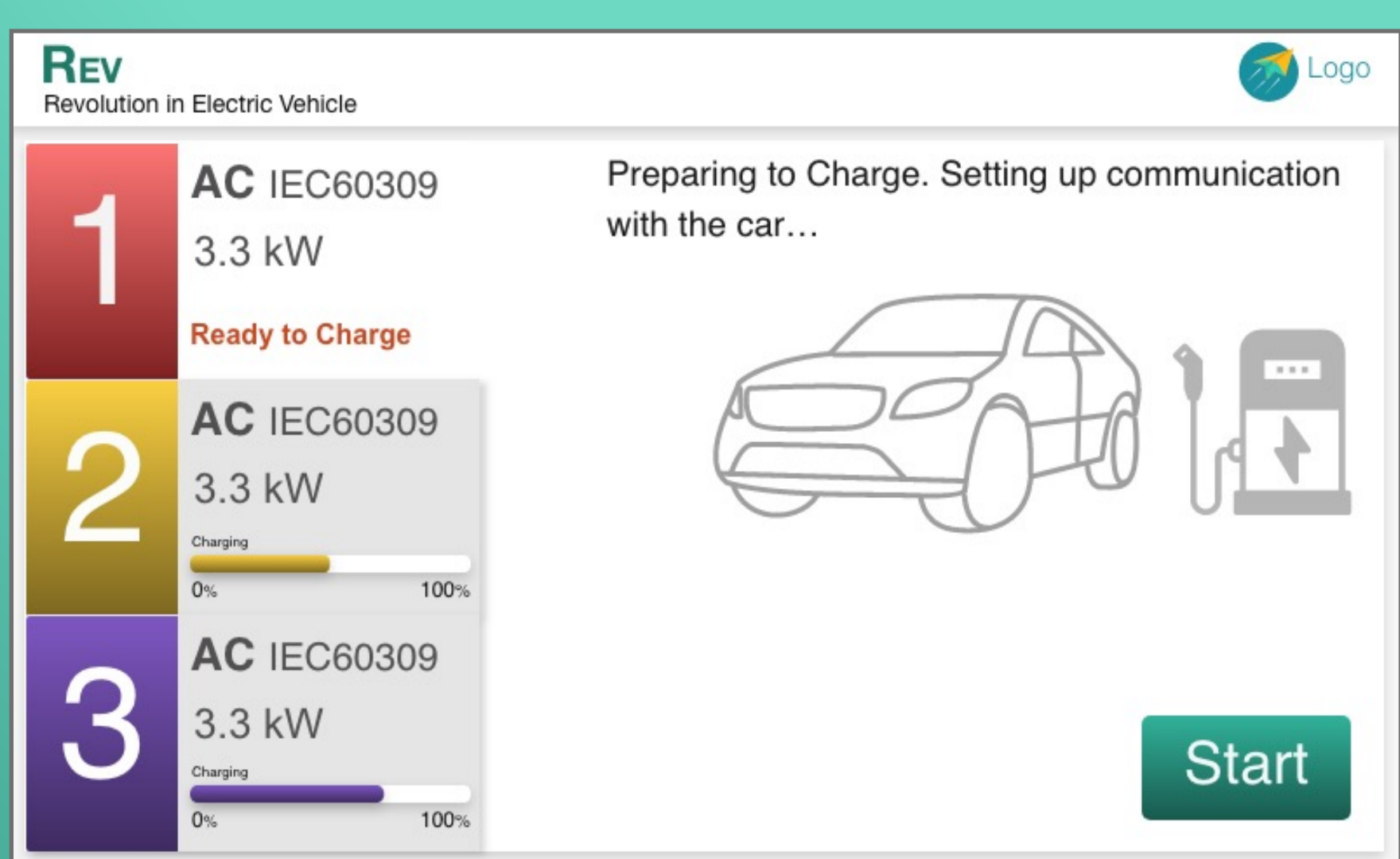


REV - Revolution in Electric Vehicle



Problem

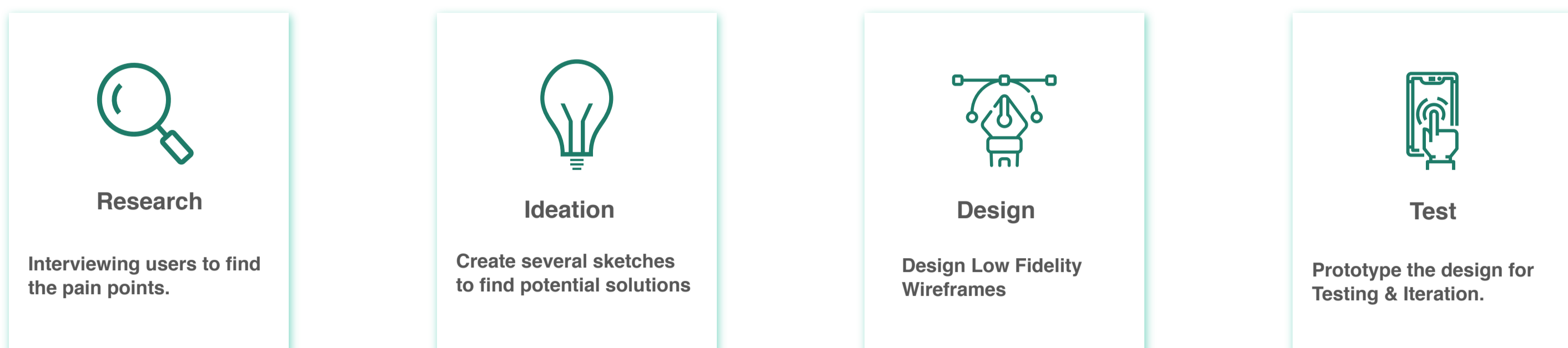
User experience of the Electric Charging Station's Dashboard.

Objective

Create a new Dashboard Application which includes Charging Slot Selectors, Charging Status & Indicators, Payment Options, Error Reporting & Admin Access for remote debugging.

Process

My process will be different in different projects and will be determined by many factors such as the project goals, business needs, complexity of the problem, time etc. Here I'll describe my process for solving this problem.



Research

Define the User :

EV owners who have a electric car car which is often charged at home but needs to be charged at charging stations in various instances like while travelling to far away places.

Before jumping onto solutions, I wanted to understand the context & the current challenges faced by the EV owners at the charging stations.

Pain Points

- The existing dashboard is a small screen 3.7 inches of interface.
- It has a classic retro UI with small CTA buttons & is not clearly visible during day time.
- Users cannot know the available charging slots
- The Existing UI lacks charging progress & error messages
- Payment options are error prone

Rahul Sharma
32 years old
Businessman | EV Owner
Pune, India

"Go Green, Go Electric"

About

Rahul owns a restaurant & is a EV Enthusiast & a proud owner of a Tata Nexon EV. He likes to travel around during the weekends for sight seeing along the Western Ghats & nearby Coastal areas.

Frustrations

- Electric Charging Stations are difficult to use.
- The UI is not intuitive & often times it won't show the exact charging status.
- Available charging slots are not clearly highlighted
- Hard to see error messages in the existing dashboard.

Goals

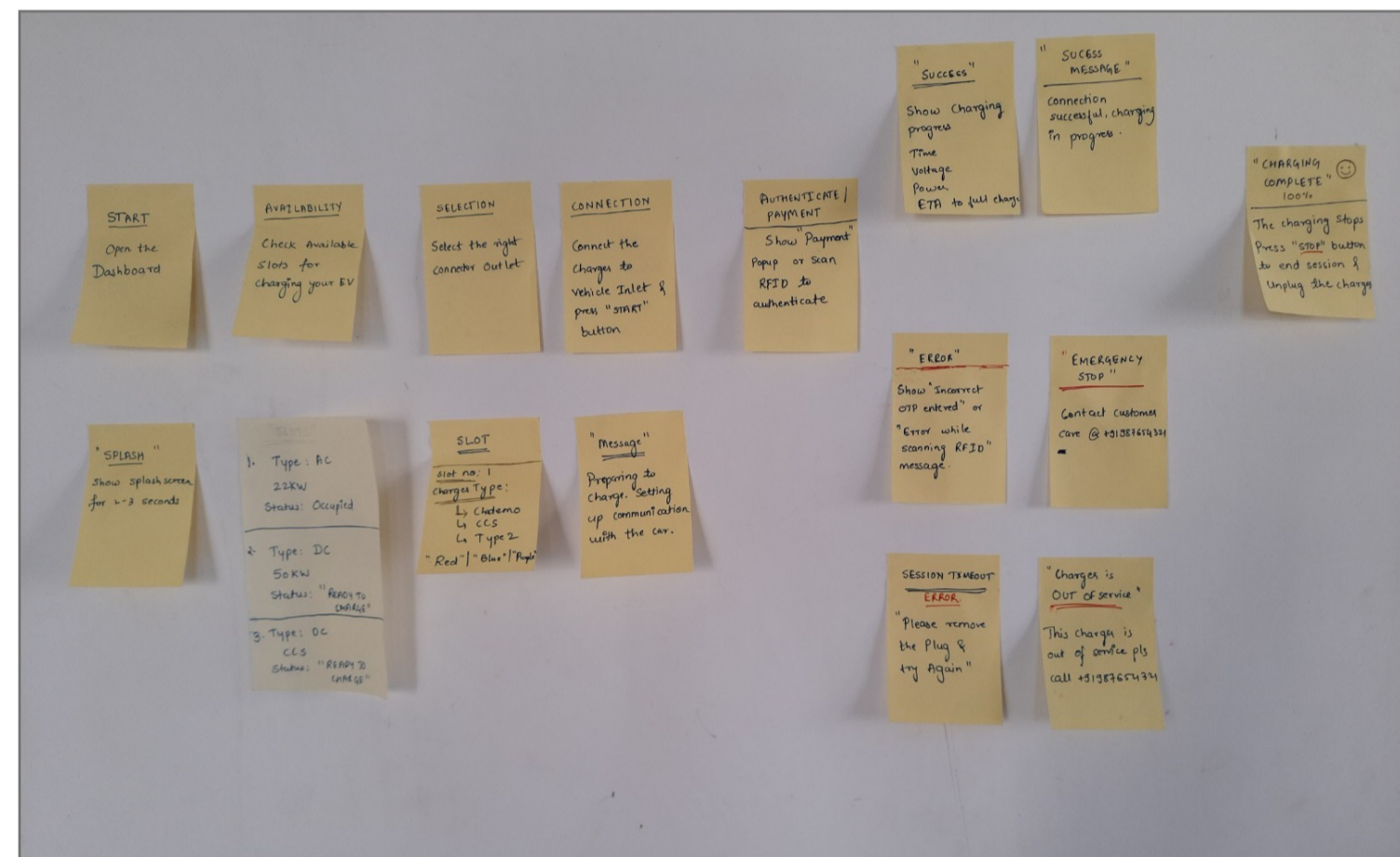
- Hassle free experience while charging the EV.
- Electric Charging Stations should be easy to use.
- The Dashboard UI should be usable & clearly visible in daylight.
- Additionally it should also show the exact charging status.
- Error reporting should be improved.

Ideation

Potential Solutions:

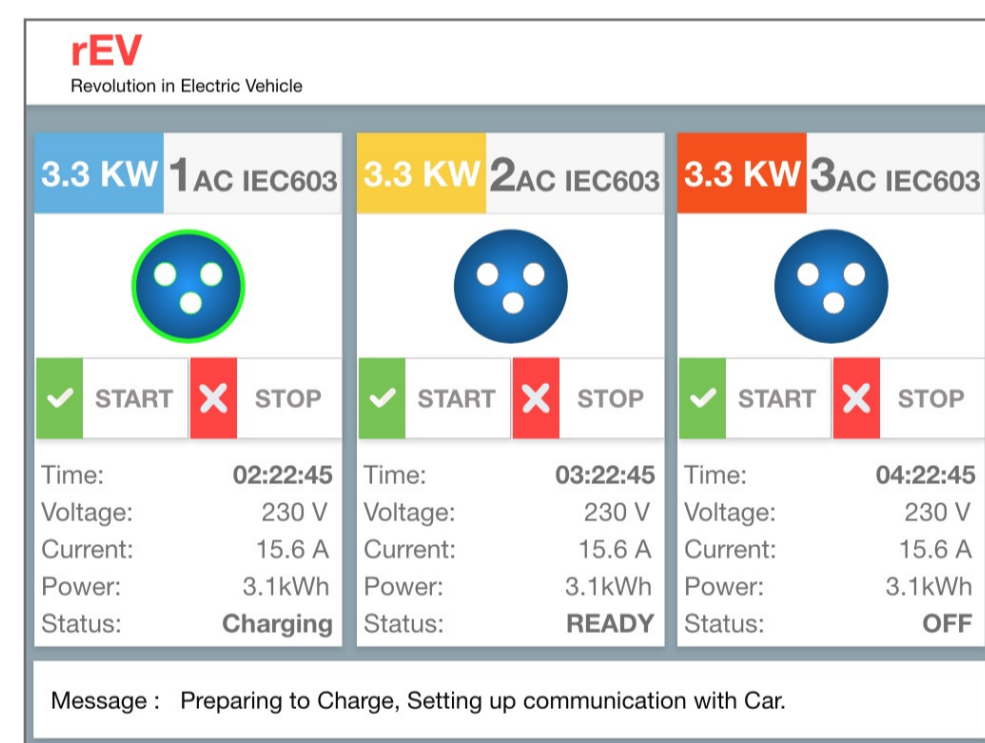
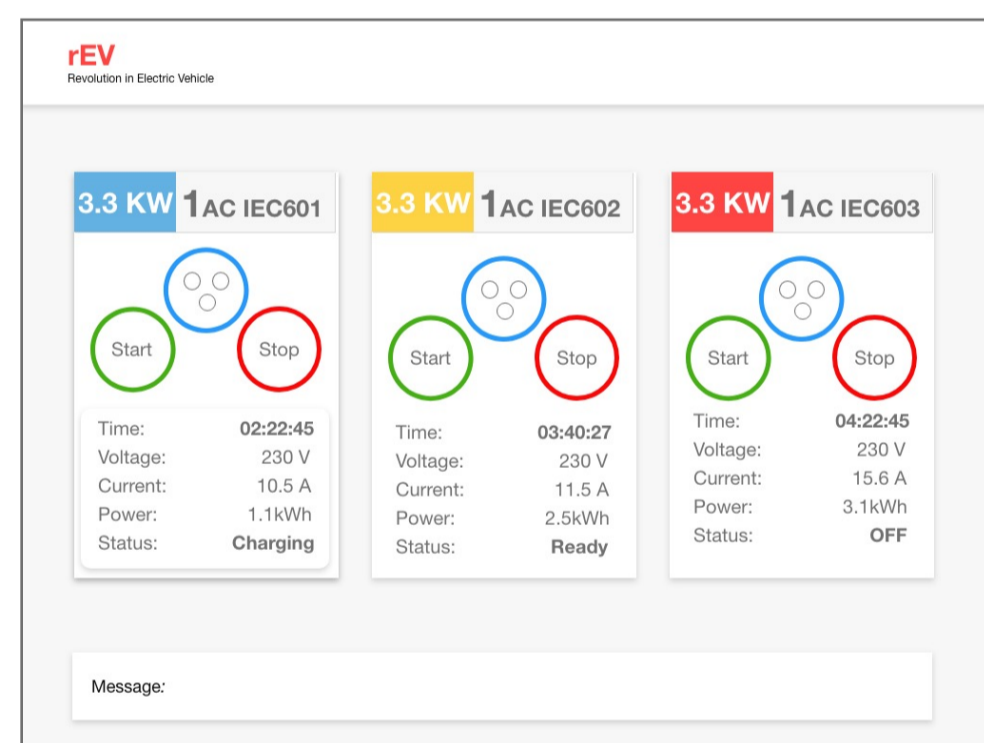
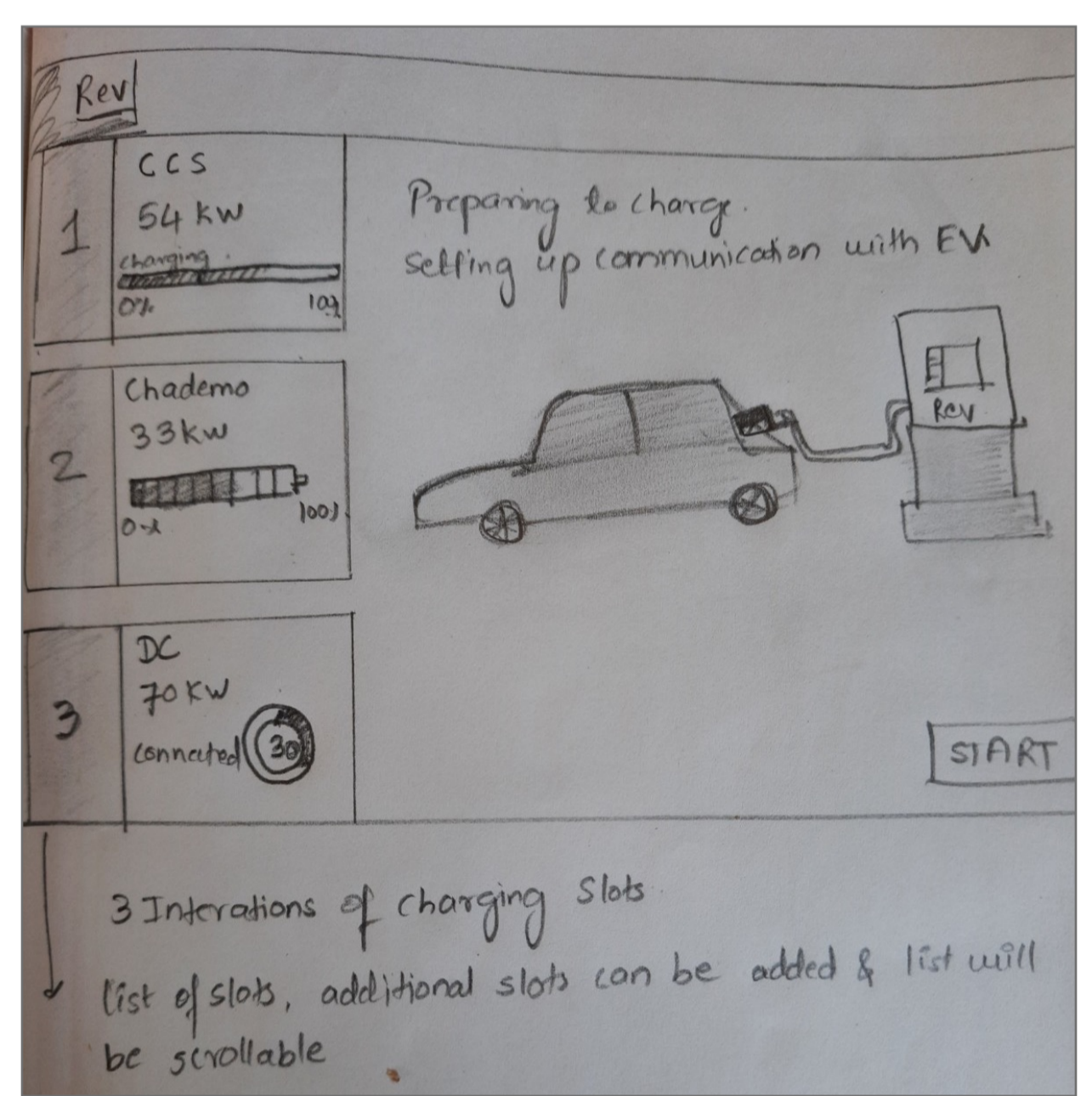
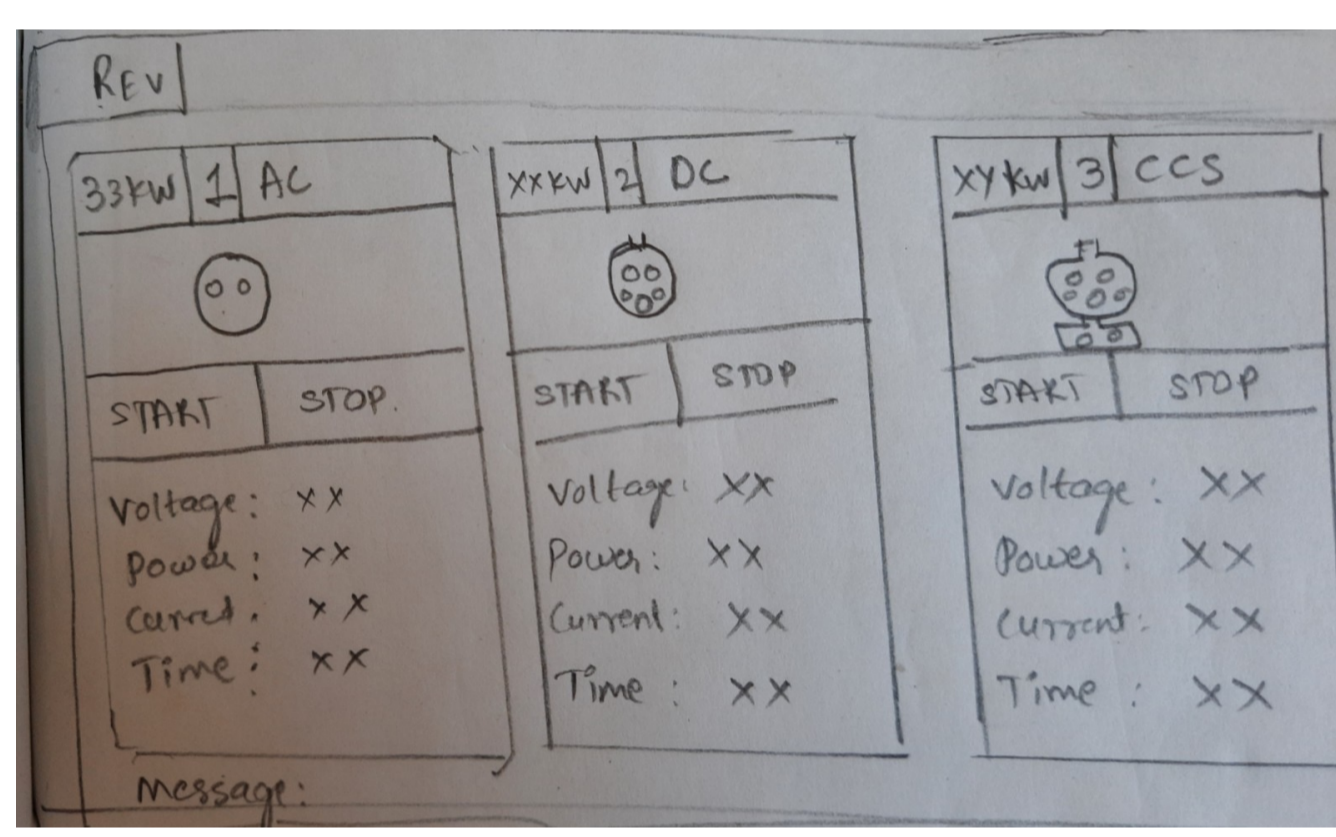
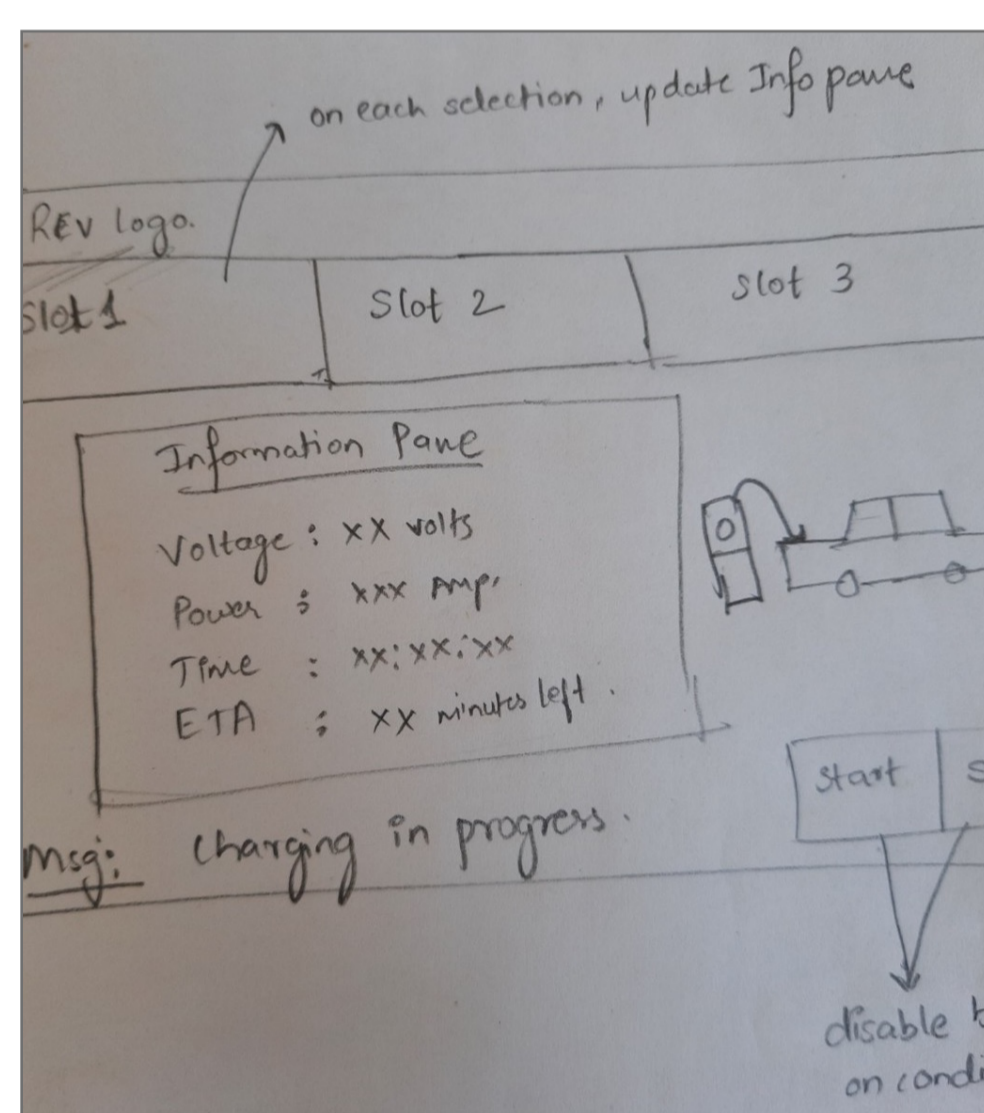
- After I spoke with the charging station owner & EV owners, I came to the conclusion that the Dashboard is best usable when it is designed for 7" screen size/ Tablet/iPad screen size.
- Tab Based UI Approach for selection of charging slots.
- Include Charging metrics, status & progress bar for better readability.
- Use Dark colors for the dashboard, so that they are visible even in day light.
- Include a common error reporting toast message / popup throughout the user journey.

User Flow



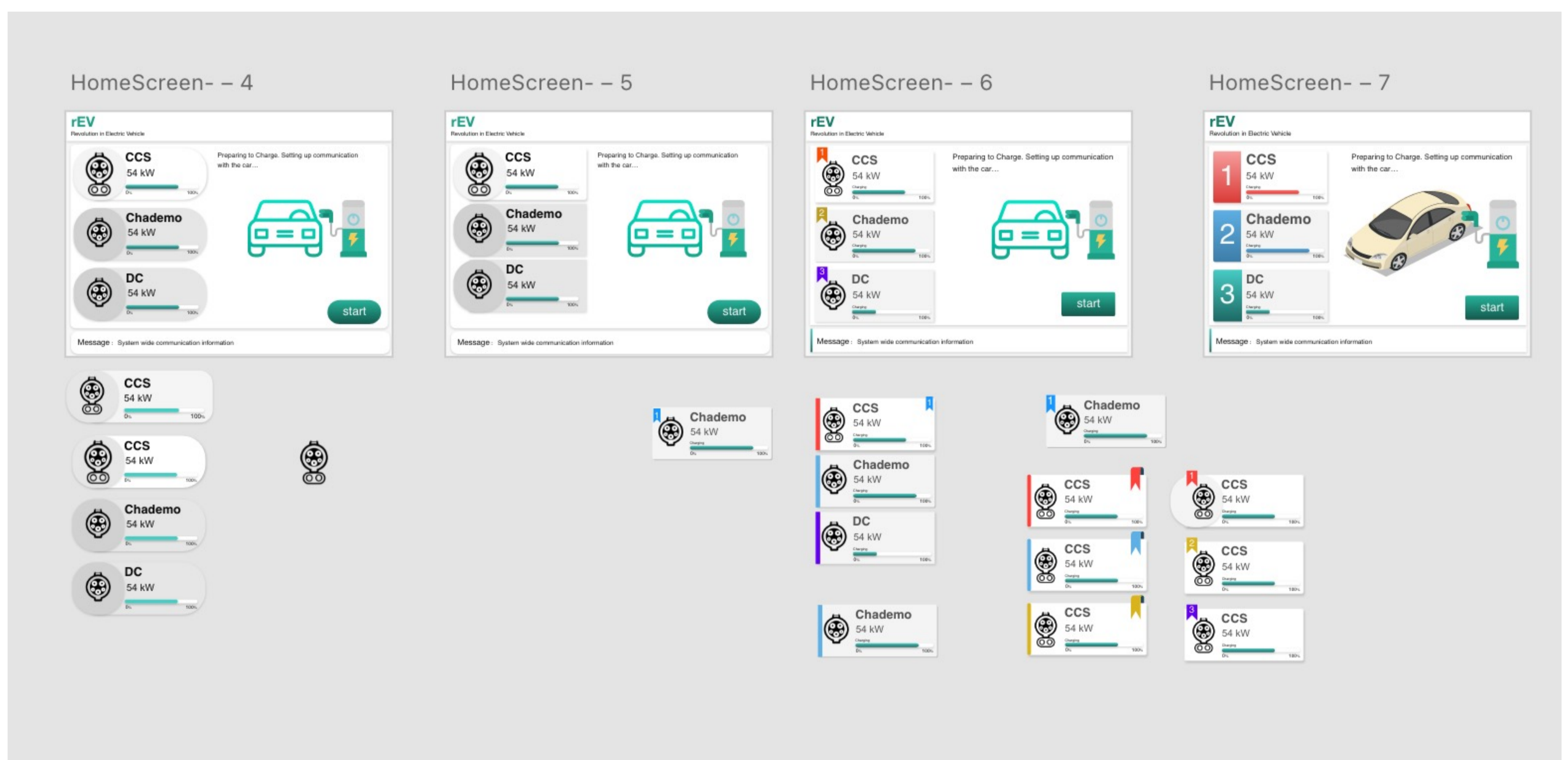
Design

Wireframes: Low Fidelity Designs

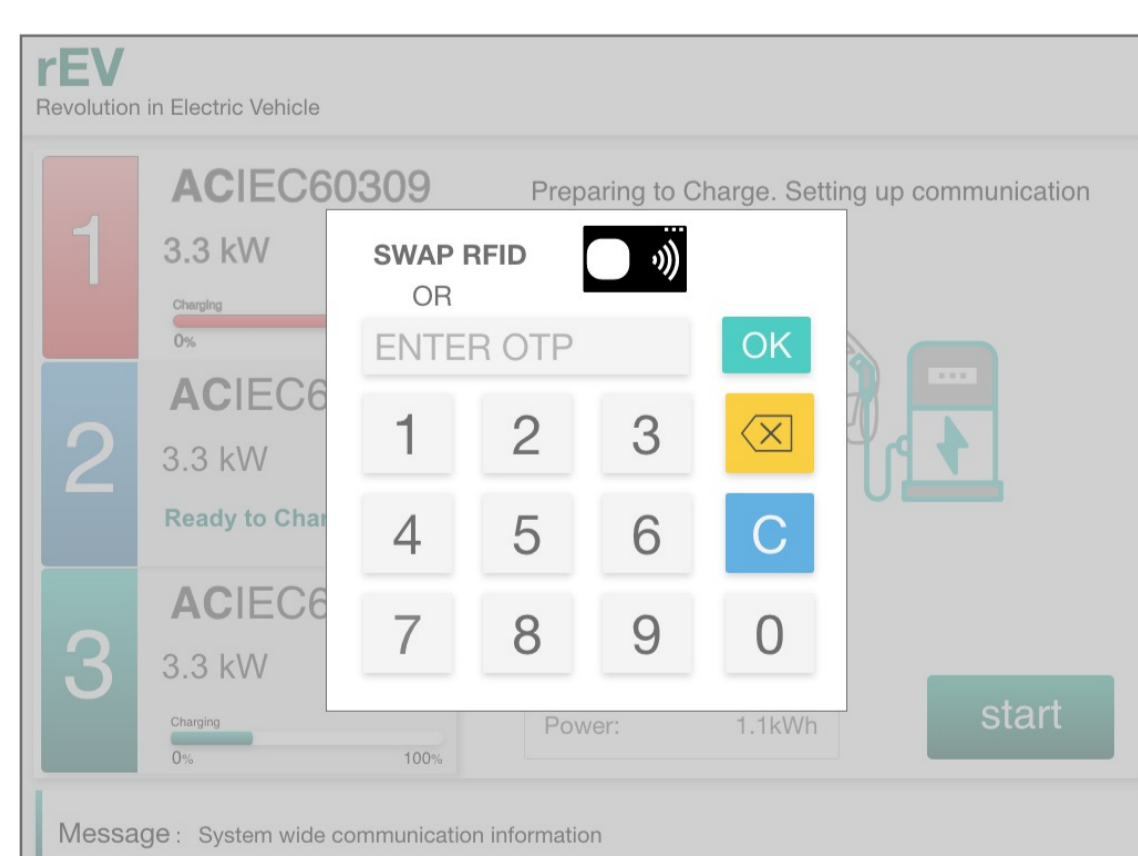
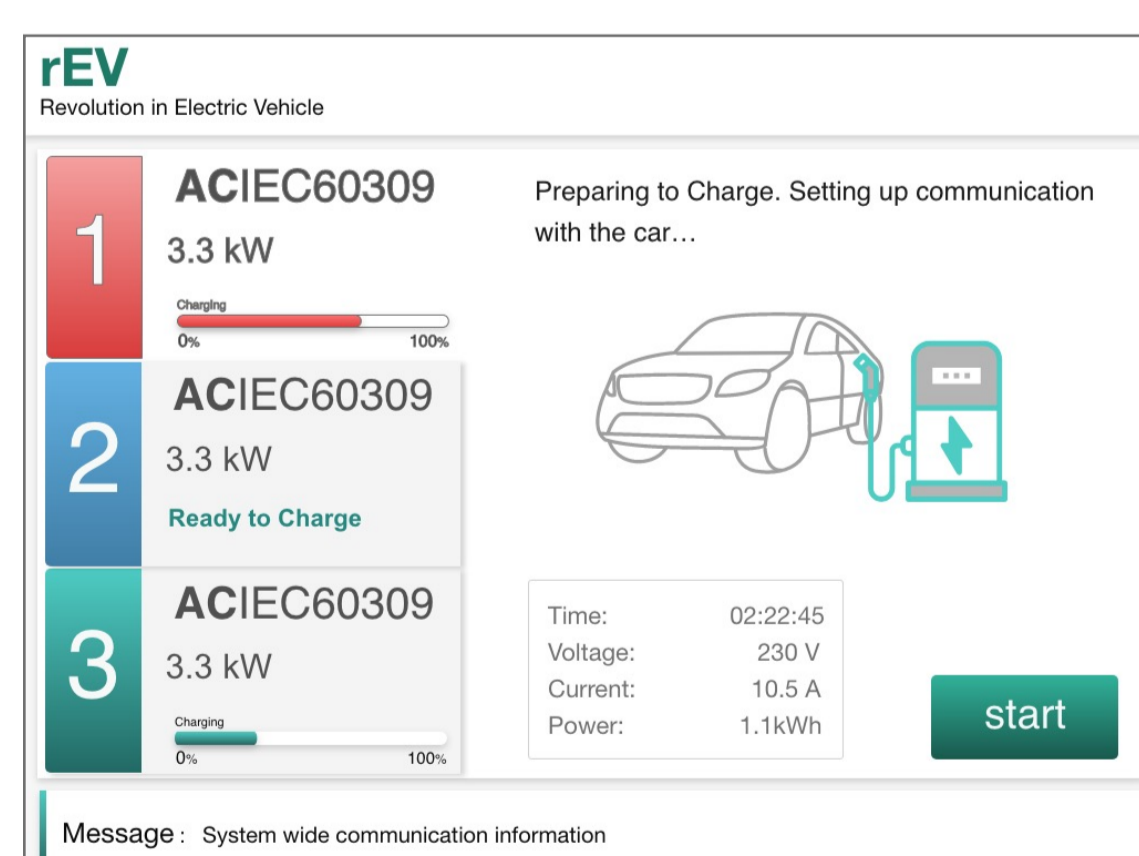
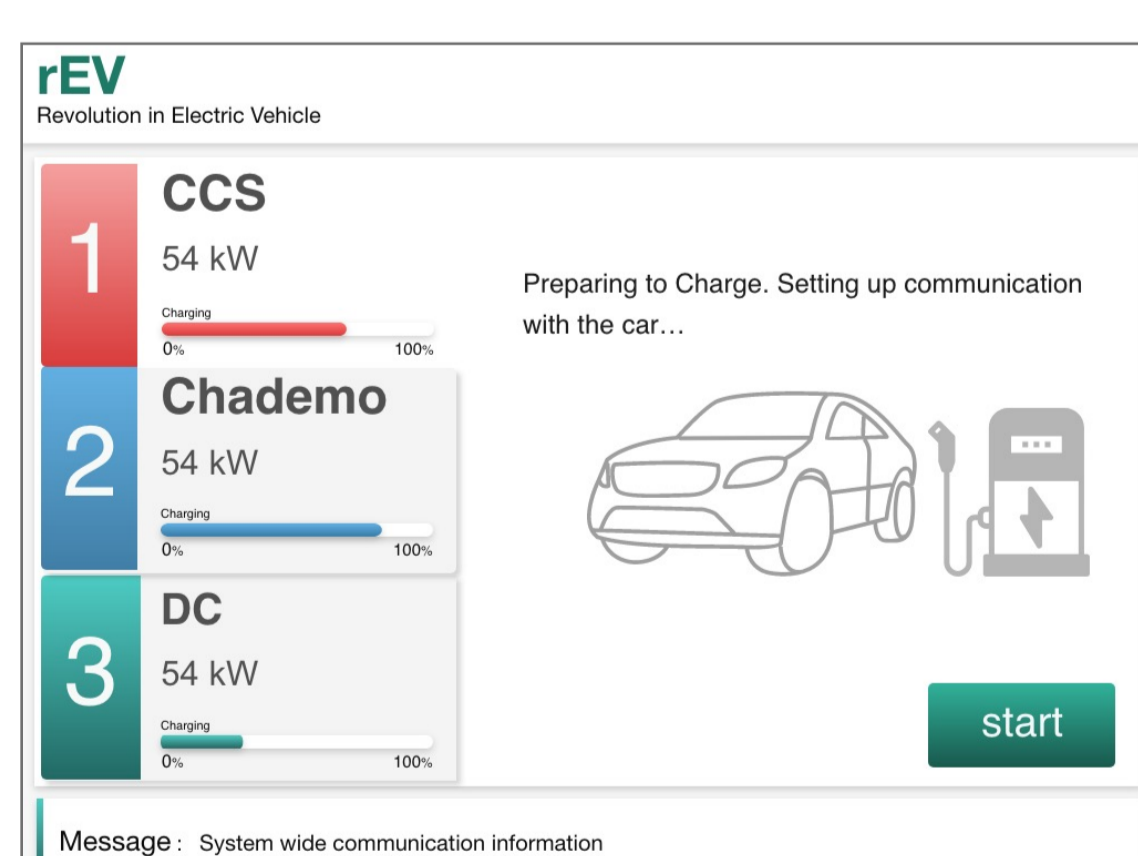


Test

Iterations



Final Designs



Scope of Improvements

- A companion mobile app can be designed which will be connected with the cloud to give realtime updates of the EV Charging
- Payment can be made Prepaid wherein user can selected a particular amount & the EV will be charged accordingly
- Admin Panel: Admin can debug & access the dashboard remotely.

Admin Panel

