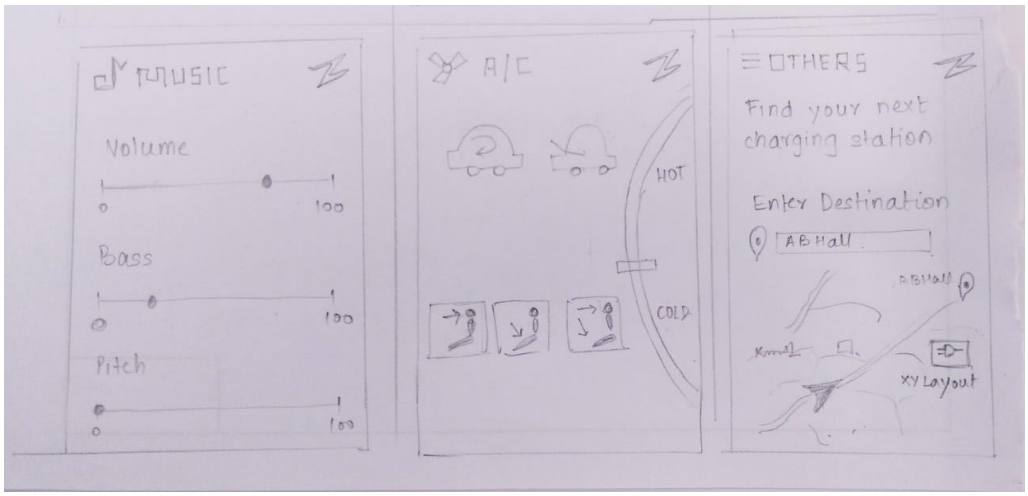
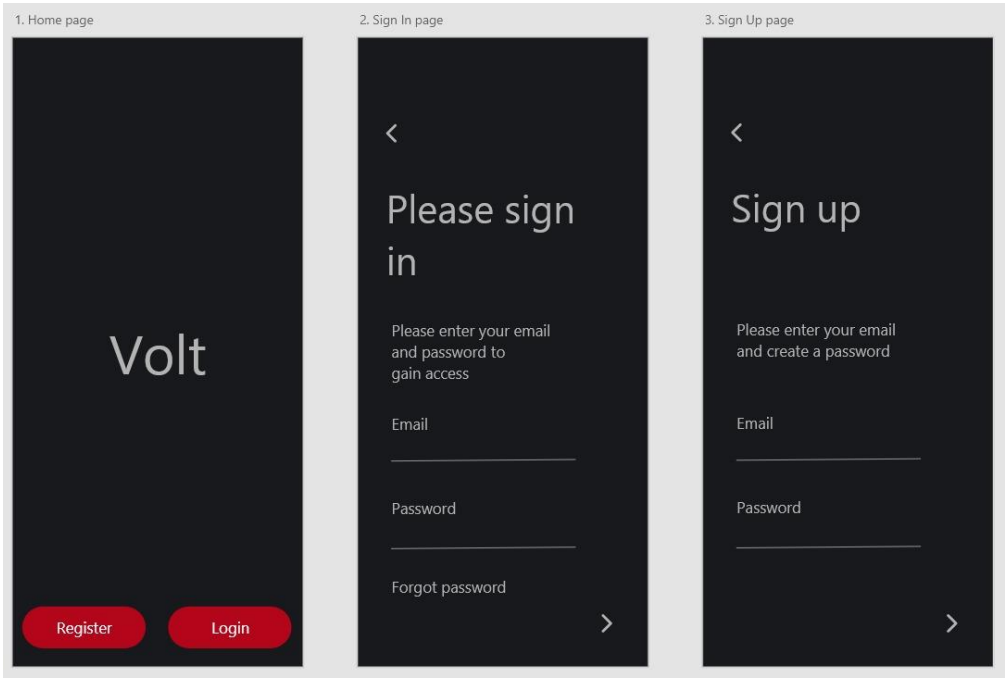
Heuristic Evaluation

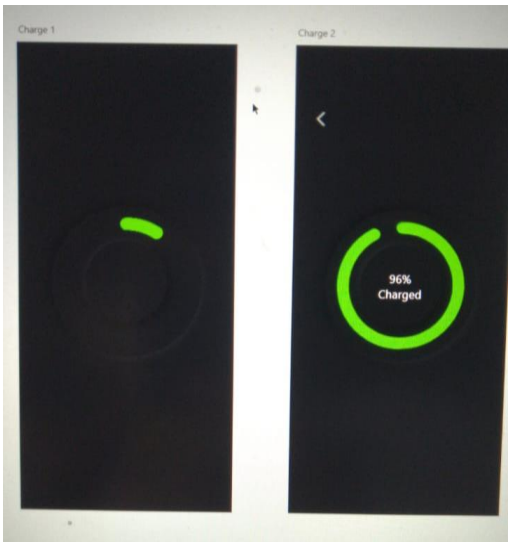
1. We started by having a low fidelity prototype (sketches on paper)



2. For prototyping, we used Adobe XD. Below is an image of the first screen we made.

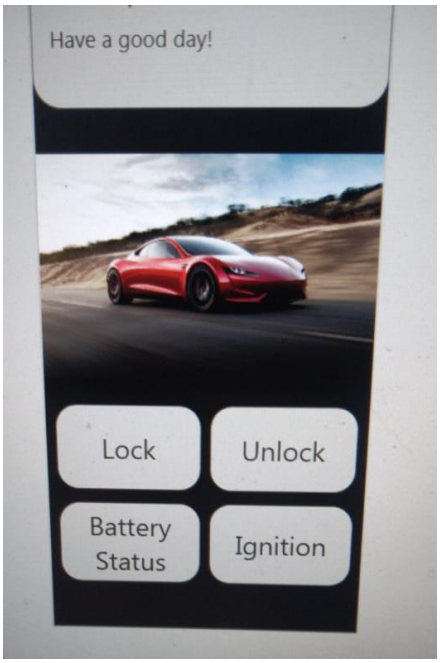


3. Designed a battery indicator for the user to see charge percentage on the app.

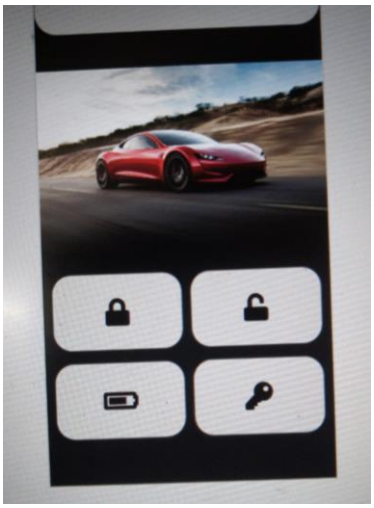


Used green colour to represent the generally used nomenclature for a battery.

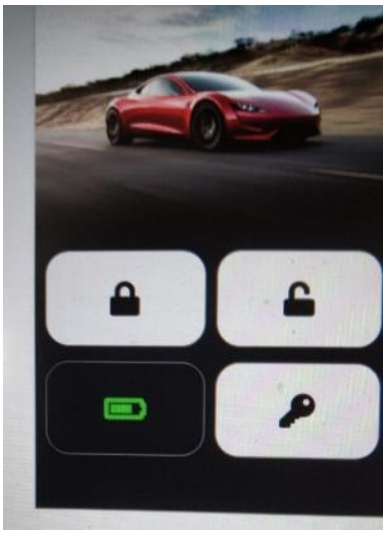
4. Designed the first iteration of the home screen.



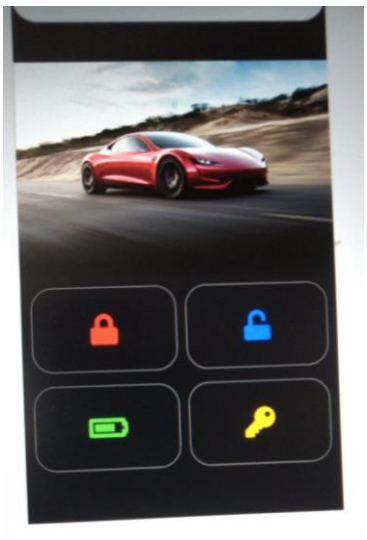
5. After discussions, we changed the home screen and used icons instead of text for ease of usability.



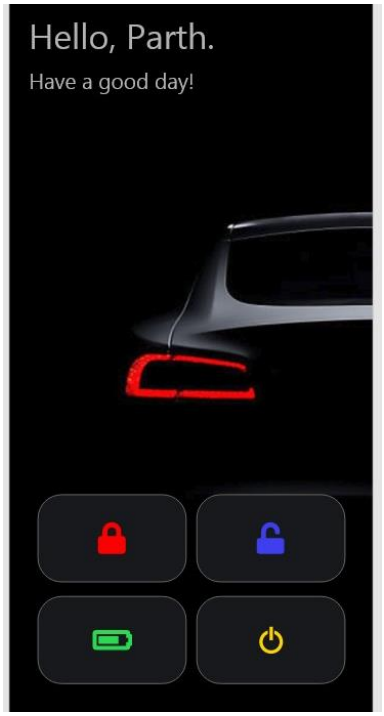
6. We liked this layout better but the design was not very user friendly. So we thought of using colors for icons.



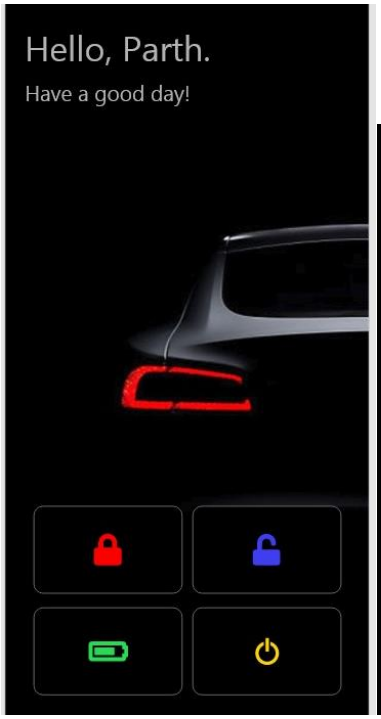
7. This was a better design so we thought of using colors for all the buttons.

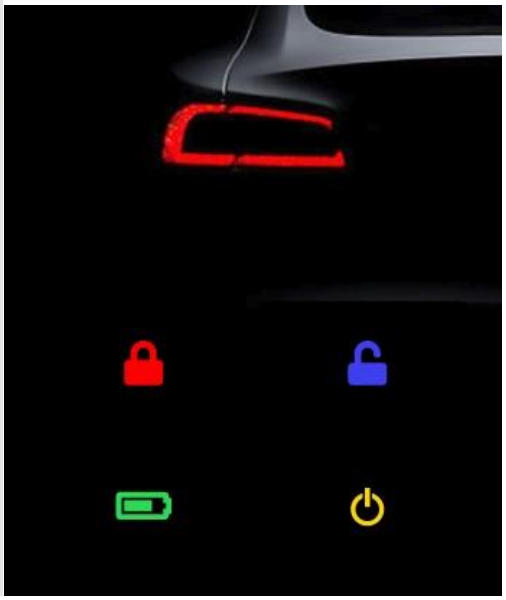


8. Once we had decided the basic layout for the buttons, we went on to modify the home screen for better UI. Also changed the ignition icon for better visual representation.

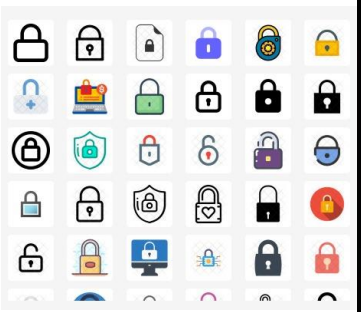


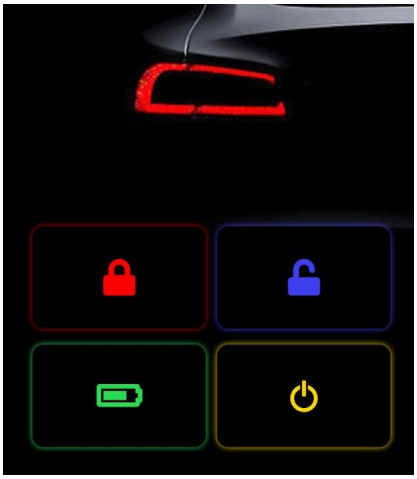
9. Experimented more with these icons: various shapes, edge radius, colors, highlights and glow.



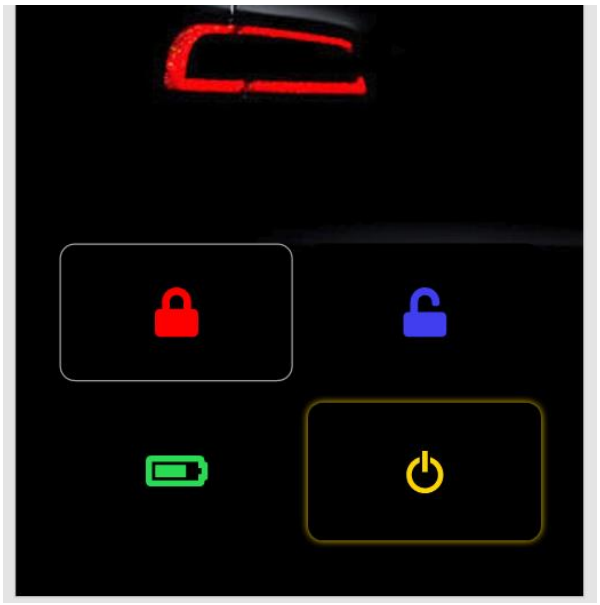


10. We looked at various different icons and tested those. We decided to not keep a solid white line border for the buttons but instead use a light glow.

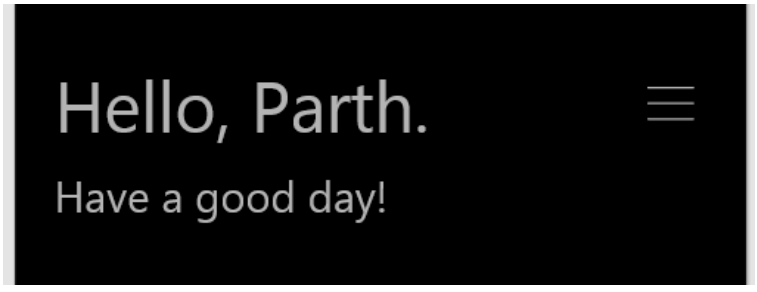


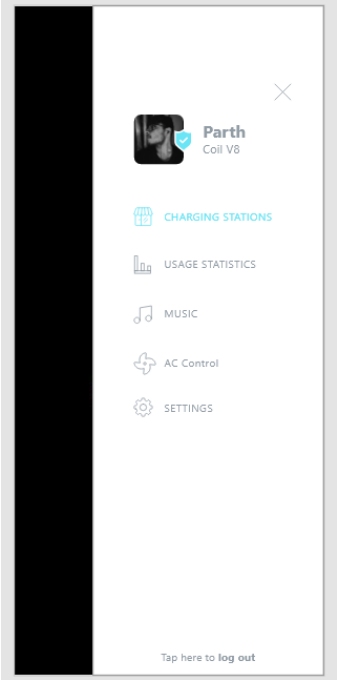
11. Changed the above design to highlight the button only if the user has selected that option.



12. Now we had to add more options so we decided to use a ‘Hamburger menu’.

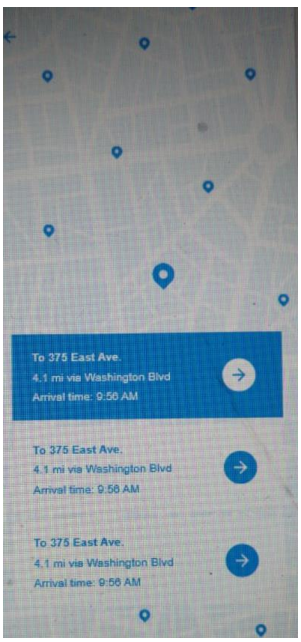


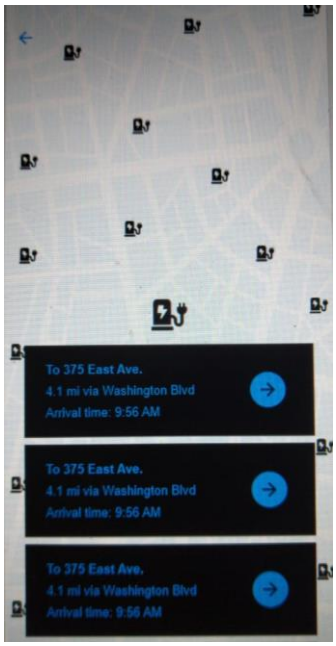
13. The hamburger menu expands to show more options. We decided to keep a very minimal, clean, easy to use and aesthetic design for this part.

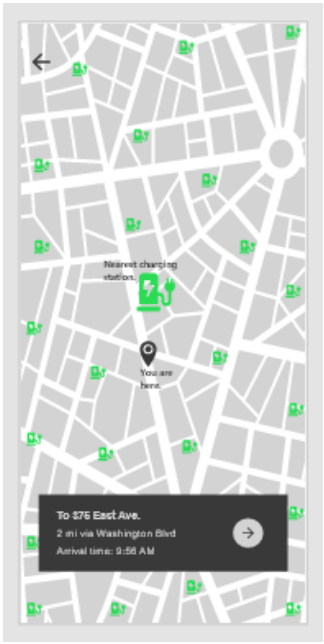


We can select the various options in this menu to navigate to other screens.

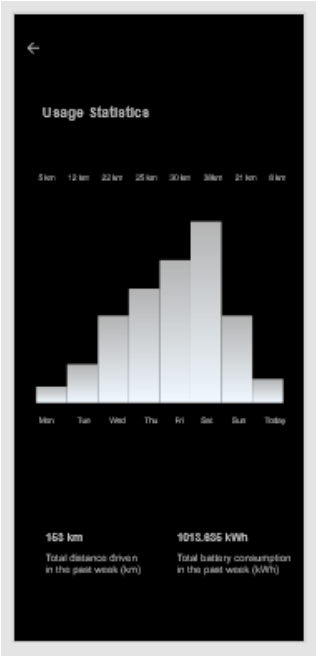
14. The various screens were designed keeping in mind flexibility and user control in mind.
We had issues settling on the design and color palette for maps but finally decided to use the design shown in the right image. The map was inspired from the real-world application Google Maps.







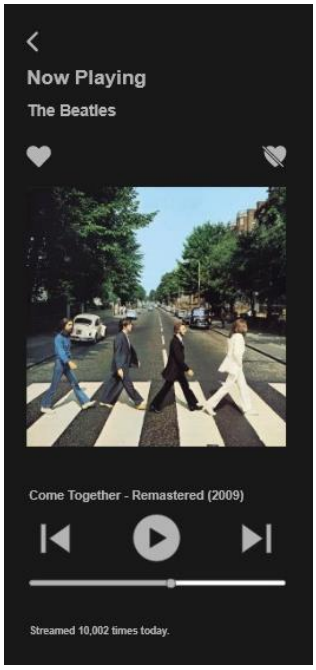
Used green to represent battery charging stations. The station closest to the user is bigger in size for visual communication.



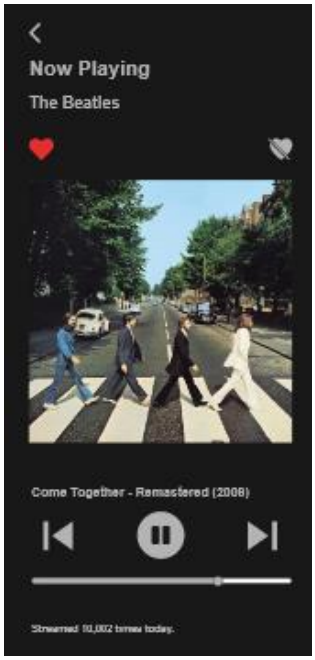
This screen shows the user various statistics. This helps the user document their everyday usage, battery consumption and also the total distance travelled.

15. We added a screen for music control so that user has complete control through the app and won't need to interact with the hardware (unless necessary).

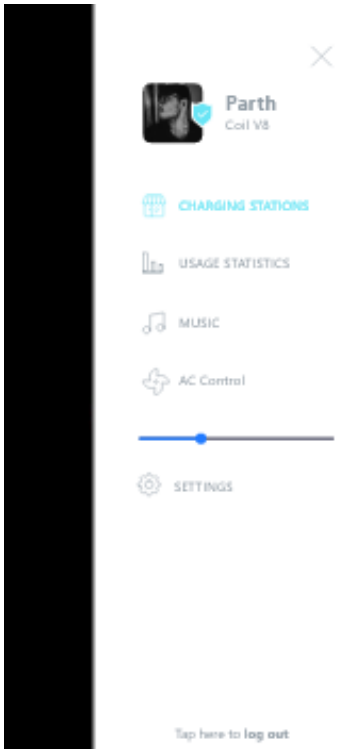
This screen does not look very inviting, i.e., fun to use. So, we added more designs inspired by the application 'Spotify'.



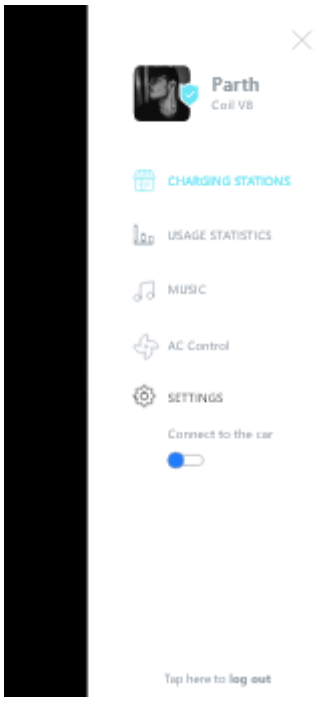
This screen looked very plain so we added a subtle pop.



16. We then added control for the air conditioner in the menu.



17. We also added connectivity option under the settings tab.



18. If the device is not connected to the car, the user will not be able to use any of the features provided in the app.
    To tell the user that they are not connected to the app, we added a screen for error message.