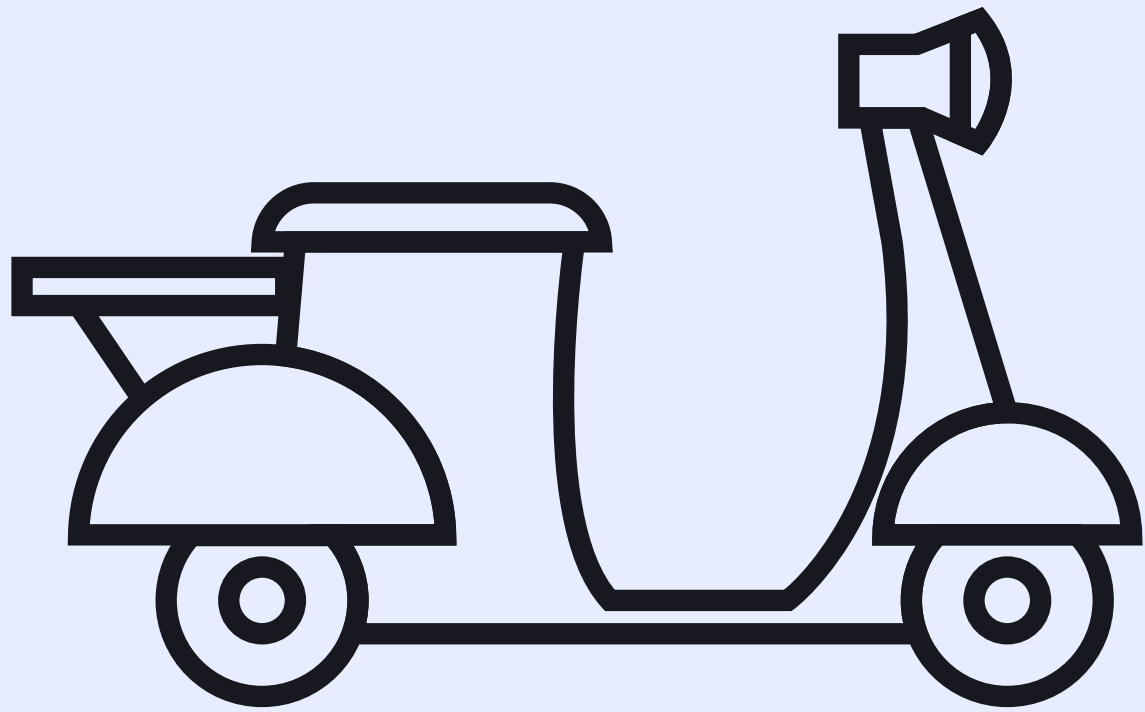


LIMITER

A smart parking system

PROBLEM STATEMENT



To develop a GUI enabled for a smart parking system near CC3 building. The parking area is equipped with IoT sensors to send data that highlights the occupied and available parking space. These spaces are highlighted in the user interface application to make the user opt best available parking space. At the parking spot the driver will be guided by the sensor devices to appropriately park their vehicle.

APPROACH

- We created two separate interfaces for user and admin to maintain privacy
- The user and admin can navigate easily through the navigation bar to achieve their needs with app
- The user will login and select one the many empty parking slots present and register his vehicle there, and after the time is up he will either leave the parking or increase the time
- The admin can later the number of slots present, change the maximum time which a vehicle can stay all while observing the parking






LIMITER

USER

ADMIN

SELECT THE ROLE

Any user will be directed to launch page after opening the application where they will have to choose in which mode they want to run the application (i.e user or admin)



Email

Password

[Forgot Password](#)

LOGIN

[New to Limiter Sign Up](#)

USER LOGIN

The first thing that the user will see, if they wish to open the application in user mode is user login. This has three parts:

- Login
- Forgot Password
- Sign up

Enter OTP

email

000000

RESEND

SUBMIT

FORGOT PASSWORD

When the user clicks on forgot password in the time of login. The app will take the email he has already entered and sends an OTP to it which he will be required to enter here inorder to change their password.



USER SIGNUP

If the user is new to the application, they must click on Register New User button which will redirect the user here where the user will be asked to fill the mandatory details The user needs to enter an unregistered email address and a custom password (twice) and tap the “SIGN UP” button in order to register the new account. All the fields are mandatory.


Email

Password

[Forgot Password](#)

LOGIN

[New to Limiter Sign Up](#)



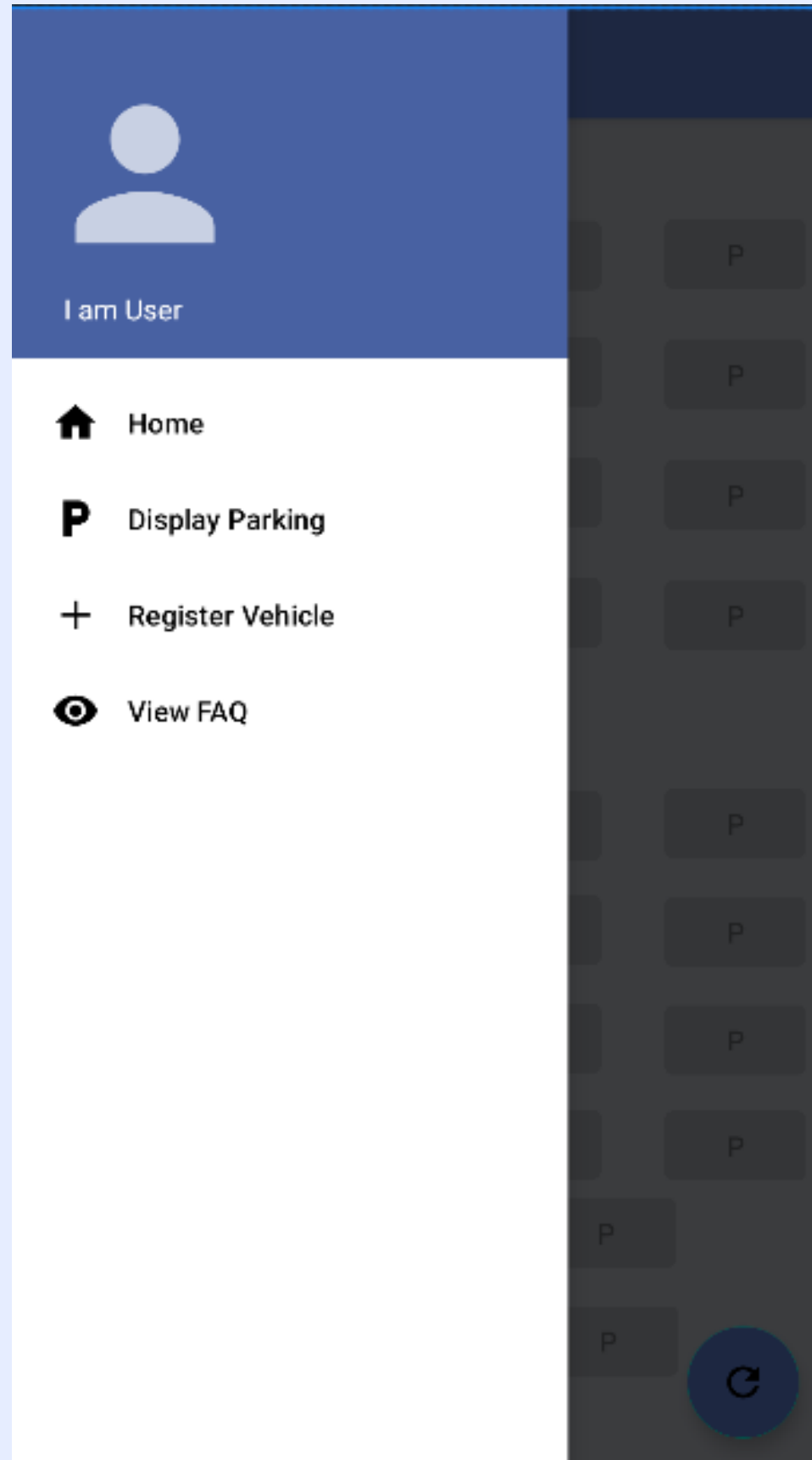
Email

Password

LOGIN

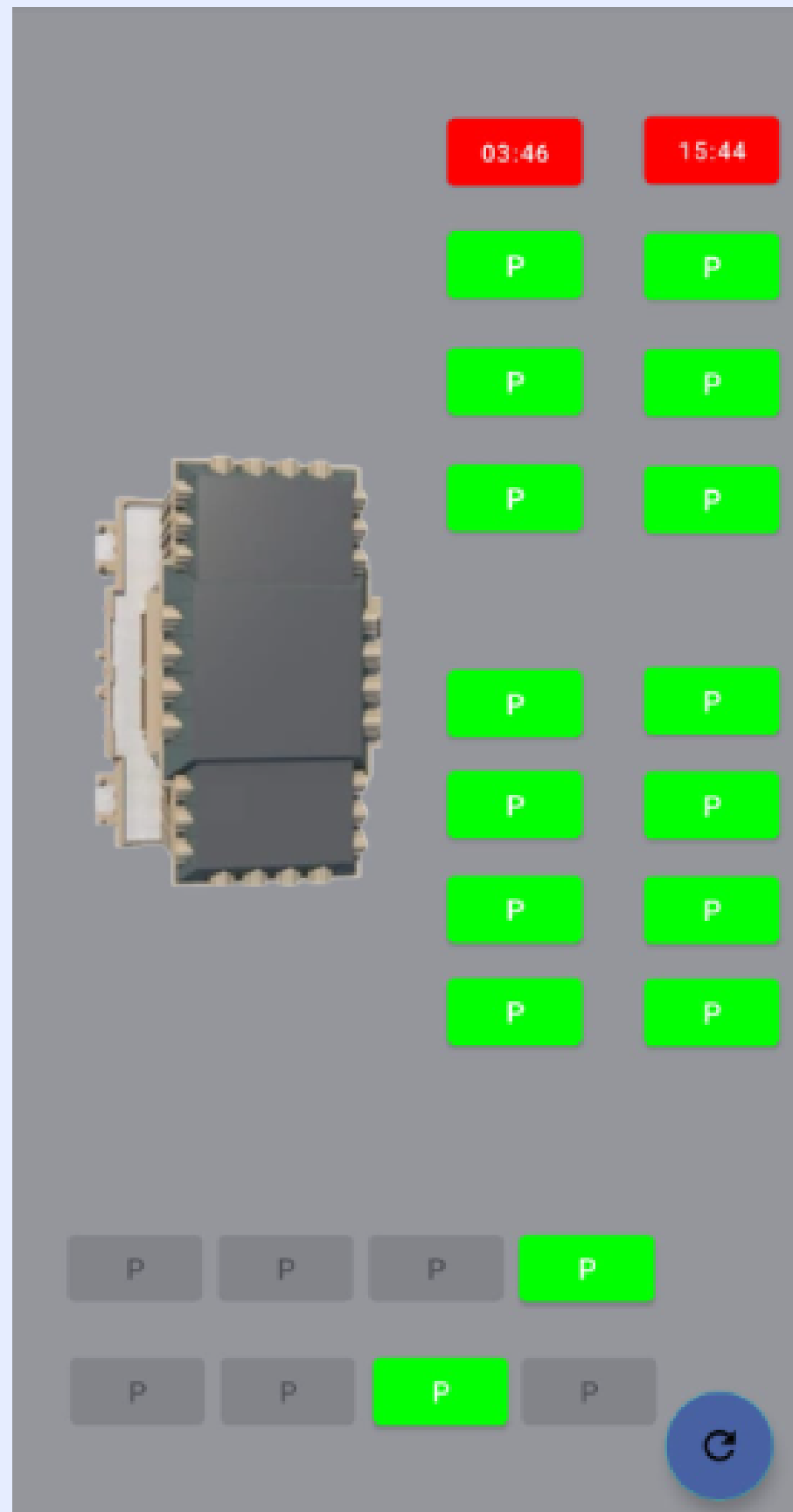
ADMIN LOGIN

If one decides to run the application in the admin mode and clicks on “ADMIN”, the app will be redirected to the admin login. Here the admin should enter all the mandatory fields and click login to enter into the app.



USER SIDEBAR

The sidebar provides quick navigation between app pages , enabling seamless movement and access to various sections for an efficient user experience.



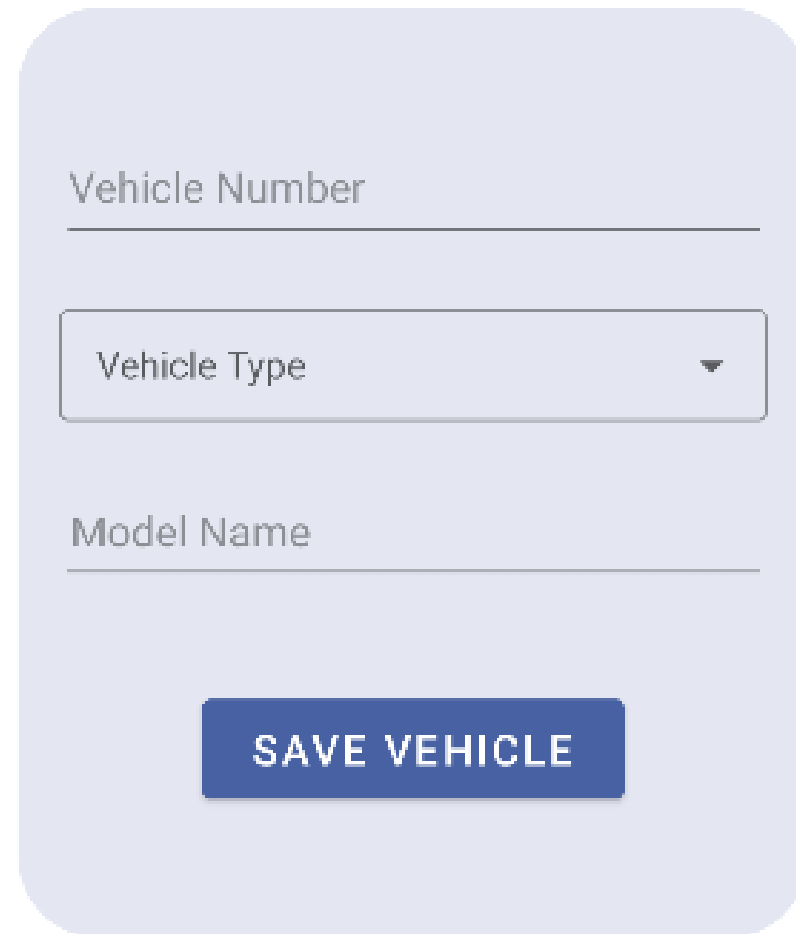
DISPLAY PARKING

Users can view the current parking status of the parking lot and from here they can book a parking space if available. The red slot indicates it is occupied, green available and yellow slot is being taken.

REGISTER VEHICLE

Users have to enter all three details . All are mandatory.

- Enter vehicle number : users have to enter vehicle number.
- Select the vehicle type: from the drop down list users have to select the vehicle type .
- Enter Model name : users have to enter the model name of their vehicle. Then click on save vehicle



A light gray rounded rectangular form with three input fields and a button. The first field is labeled 'Vehicle Number' and is a text input. The second field is labeled 'Vehicle Type' and is a dropdown menu with a downward arrow. The third field is labeled 'Model Name' and is a text input. Below the fields is a dark blue button with the text 'SAVE VEHICLE' in white capital letters.

Vehicle Number

Vehicle Type ▼

Model Name

SAVE VEHICLE

USER HOME PAGE

User can see this after registering his vehicle at any slot, this includes these two functionalities

- Increase the timer : users can increase the timer of their parking slot if required some extra time.
- Leave parking space: users can vacate the parking slot booked by him.



INCREASE TIME

LEAVE PARKING

Ques : What does it mean when a parking slot is green?

Ans : It means the slots are empty and are ready to be occupied. So hurry up and register that parking spot for your vehicle.

Ques : Why can I not occupy a parking slot that is yellow?

Ans : A yellow slot means that particular parking slot is being booked by someone. So since two people cannot book the same slot at the same time, the application does not allow you to occupy the yellow parking slot. But we are sure there are plenty of green slots available for you to occupy.

Ques : What does timer on red slots signify?

Ans : The timer that is running on red slots is the amount of time left for a vehicle in

FAQ

User can see the FAQs updated by the admin here if he has any doubts regarding the application. Admin can also see the FAQs to review his answers



DISPLAY PARKING

ADD SLOT

SET MAX TIME

EDIT FAQ

ADMIN FUNCTIONS

The Admin Functions page empowers administrators with essential controls: parking display, slot addition, time limit settings, and FAQ editing. Streamlining management and enhancing user support.

ADD FAQ

- Admin can add new Questions and Answers for helping users by writing a Question in the question dialog box and the relevant answer in the answer dialog box.
- After filling all the details click on the “SUBMIT FAQ” button to add in the FAQ list .



Question

Answer

SUBMIT FAQ

ADD SLOT

Admin can add a new slot using this page. He will be needed to enter a particular slot number which he wishes to make available and the slot will be available for parking.

9 to 24

SUBMIT SLOT



A UI mockup of a form titled "SET TIME LIMIT FOR SLOTS". The form is light gray with rounded corners. It contains two input fields: the first is labeled "Car/Bus/Bike" and the second is labeled "Maximum Time". Below these fields is a dark blue button with the text "SET TIME" in white capital letters.

SET TIME LIMIT FOR SLOTS

Admin can change the maximum time a user can increase the parking timer according to the vehicle type of the given vehicle.

THANK YOU !