Summer Internship Report

At

Tight The Nut

Form 15 March, 2021 to 18 June, 2021

Submitted By
Aaliya Haque (BG0128)

Under the guidance of
Mr. Ashay Kohad
(Product Engineering and Operation Head)

SESSION 2021-2022

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
SHRI SHANKARACHARYA TECHNICAL CAMPUS (SSGI),
BHILAI, CHHATTISGARH, INDIA

KREBZINSTAR PRIVATE LIMITED
Pune Maharashtra 411005

CIN: U74999PN2016PTC165453

Ref: TTN/CER/2021/002 **Date: 13/07/2021**

To Whom It May Concern

This is to certify that **Aaliya Haque (BG0128)**, a student of Department of Computer Science and Engineering Shri Shankaracharya Technical Campus (SSGI), Bhilai, Chhattisgarh, India has successfully completed 03 (Three) Month (From 15th March 2021 to 18th June 2021) long internship programme at **Krebzinstar Private Limited**. During the period, she worked on the technologies such as Angular, Python (Flask) and PostgreSQL.

During the period of her internship with us she was found punctual, hardworking, and Inquisitive.

We wish her every success in life.

For, Krebzinstar Pvt. Ltd.

KREBZINSTAR PVT. LTD. TTN

Mr. Ashay Kohad

Head Product Engineering and Operation

INTRODUCTION

Tight The Nut is creating innovative smart SaaS solutions for Un-organized Automotive Garages, and Spare Retailers with the keen approach to Revenue, CRM and Brand visibility. TTN garage is android and web based application to digitalize the workshop operations and provide in-app analytics to monitor and provide actionable intelligence to grow by 30%.

Website: www.tightthenut.com

*Industry***:** Information Technology & Services

*Headquarters***:** Pune, Maharashtra

*Type***:** Privately Held

*Founded***:** 2016

*Specialties***:** Workshop Management Software, SaaS product for Garages/Workshop, and SaaS Product.

OBJECTIVE OF INTERNSHIP

1. Develop and improve skills in communication, technology, quantitative reasoning, and teamwork.

2. To develop skills in the application of theory to practical work situations.

3. Observe and participate in industrial operations and decision-making.

4. Meet professional role models and potential mentors who can provide guidance, feedback, and support.

5. Expand network of professional relationships and contacts.

6. Develop a solid work ethic and professional demeanor, as well as a commitment to ethical conduct and social responsibility.

7. To expose students to real work environment experience gain knowledge in writing report in technical works/projects.

8. To enhance the ability to improve the creativity skills and sharing ideas.

ACKNOWLEDGEMENT

It is a matter of profound privilege and pleasure to extend my sense of respect and deepest gratitude to my guide **Mr. Ashay Kohad,** under whose precise guidance and gracious encouragement I had the privilege to work.

I owe a special thanks to **Mr. Azam Shaikh**, **Mr. Gaurav Sandhya** and the whole team of **TTN** for giving me this opportunity and for facilitating such a congenial environment.

Last but not the least, I would like to express my deepest gratefulness to my parents for their continuous moral support and encouragement.

Aaliya Haque

ABSTRACT

TTN Garage is a Cloud based garage management & business booster platform for un-organized garages.

TTN Garage provides complete garage management solution to track entire workshop operations. It has inbuilt analytical module to increase and track the business. TTN Garage has Job Card management, Inventory management, Invoicing, Reports, Analytics and lot more modules.

TTN Garage is available on mobile as well as web.

The technologies used for this platform are:

Frontend: HTML, CSS, Bootstrap and Angular

Backend: Flask and PostgreSQL

DevOps: AWS cloud

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SCHEDULE

START DATE	END DATE	TASK PERFORMED
15/3/2021	17/3/2021	Reviewed TTN Garage Web App and TTN Website.
18/3/2021	25/3/2021	Learnt Angular Fundamentals and created a small project for the same
26/3/2021	7/4/2021	Learned to use Postman and Web APIs; created responsive web pages for the given prototypes
8/4/2021	10/5/2021	Performed CRUD operation, image upload, CSV file Upload, Learned to use PostgreSQL, JWT authentication and SQL ORM.
11/5/2021	19/5/2021	Gone through the code of TTN Garage provided; understood their use in the Web App.
20/5/2021	27/5/2021	Added feedback form on customer's end of TTN Garage.
28/5/2021	16/6/2021	Added Feedback module to the workshop. Called Feedback APIs and

		displayed the calculated results in frontend. Added feature to call previous feedback on customer’s feedback form.

1. ANGULAR

While learning Angular, I have created a Web App for authentication. Here, I have created different **components** for register, login and for login options. The main app component links all the components together I have created a **service** to call various APIs. I have added **routes** for all the different components.

Github link for the same: https://github.com/Aaliya7516/AuthApp-Angular

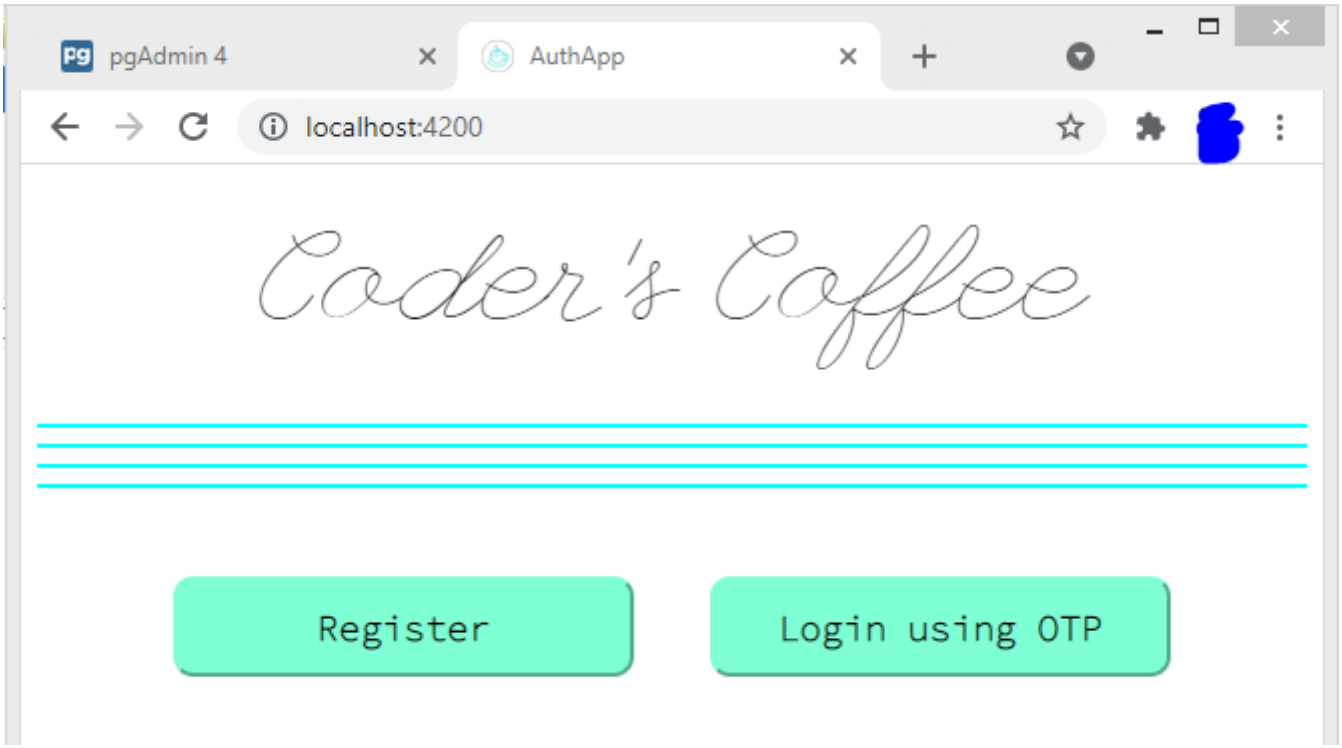
1.1 App Component

App component is used to provide the fundamental structure of the website (i.e giving common elements like header, nevbar, footer etc). It also links all the other components together.

Here, I have used it to provide Heading and title of the website.

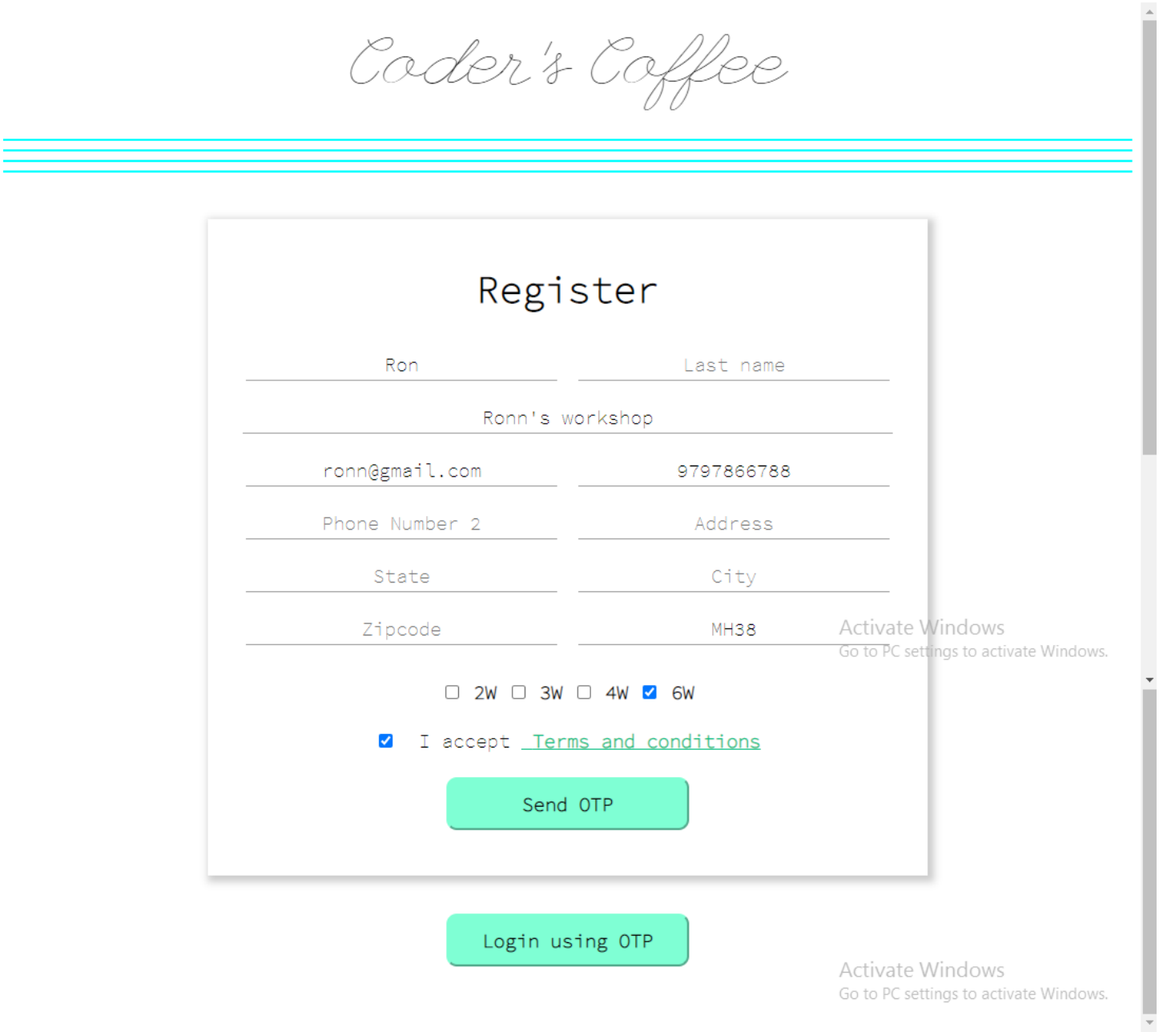
1.2 Login-options Component

I have used this component to provide to Register and Login options to the user. Here, I have used *routerLink* to provide route to both the options.

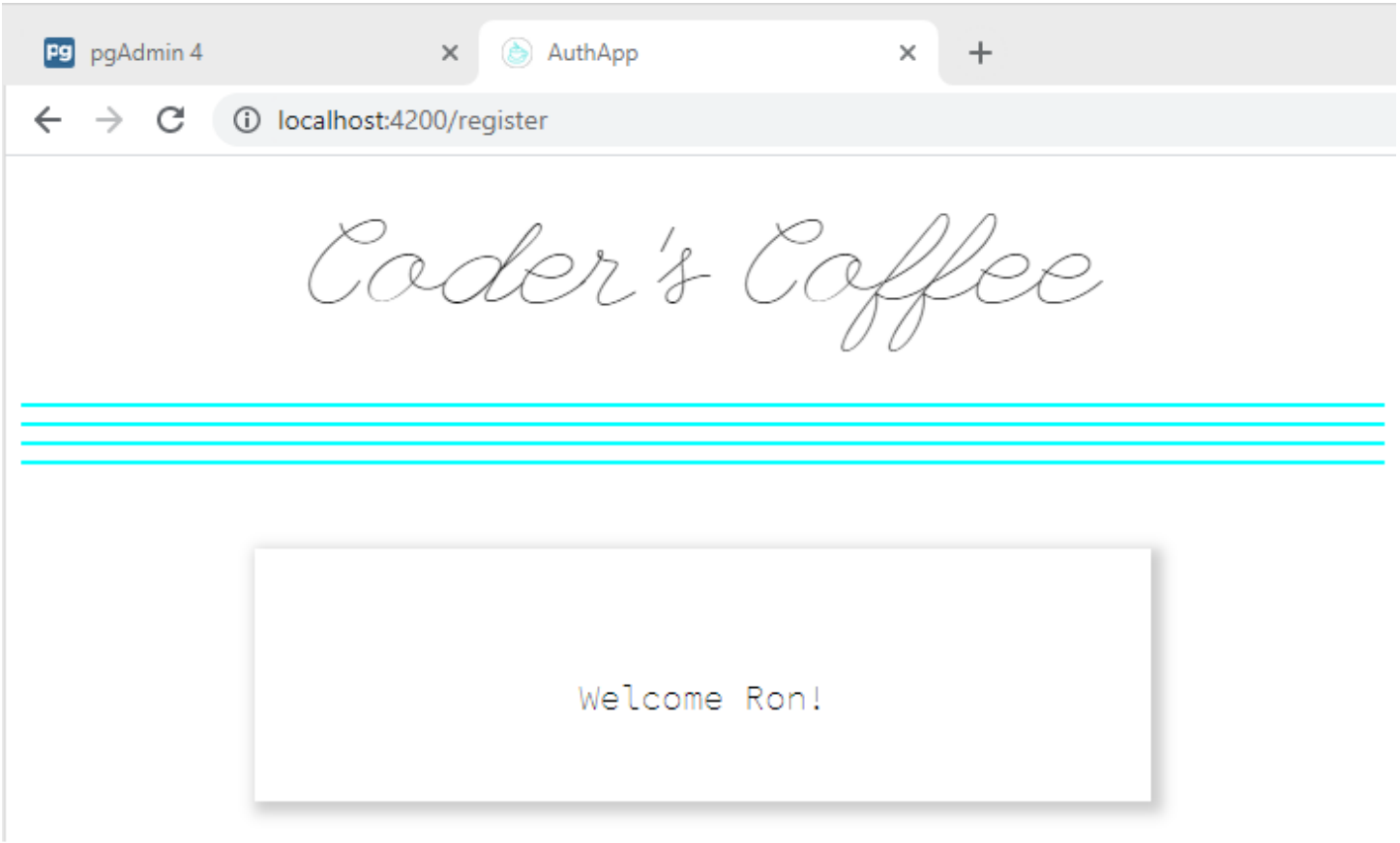


1.3 Register Component

This component is used to register a new user. Here, I have called a web API provided, to register a new user. And, when a user is logged in, a welcome message is printed.

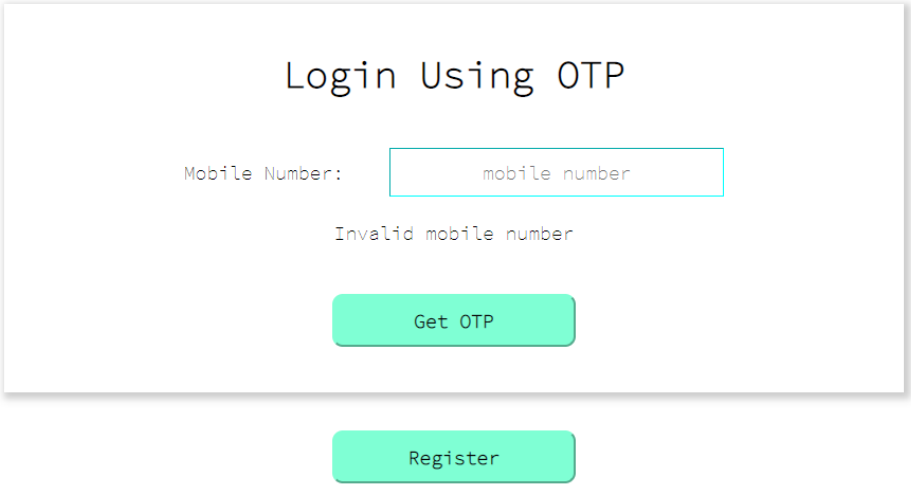


The above image represents the screen while filling the registration form. I have used form Validation to check the user Input before sending it to API. And when the user is registered, the below page will appear.

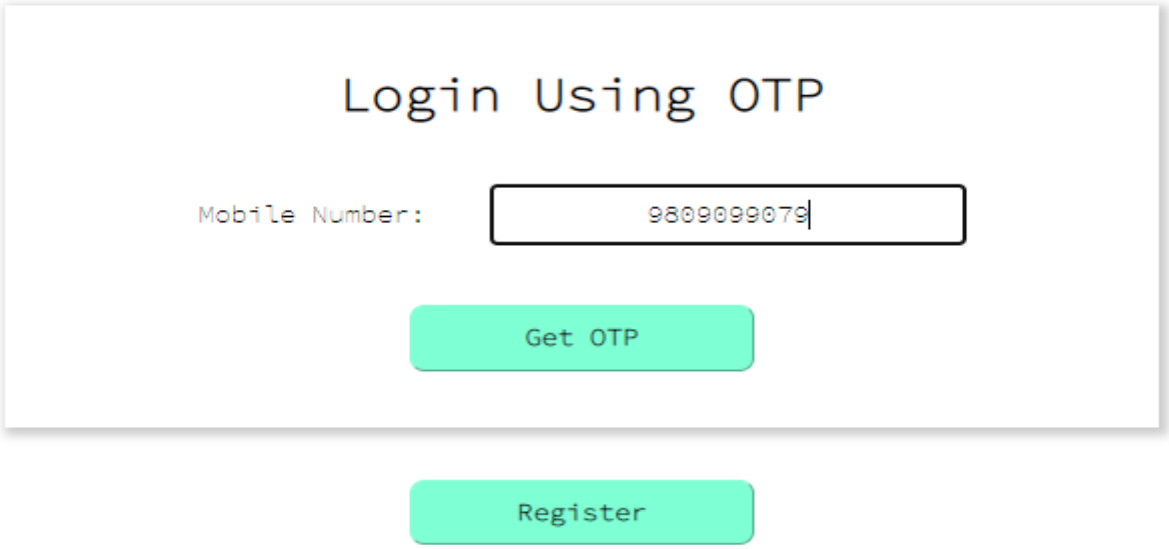


1.4 Login Component

This component is used to login a user who is already registered. Here I have integrated a login API provided, and then verify OTP and resend OTP APIs provided to me. Here, I have also used Form validation to check if number is valid or not.

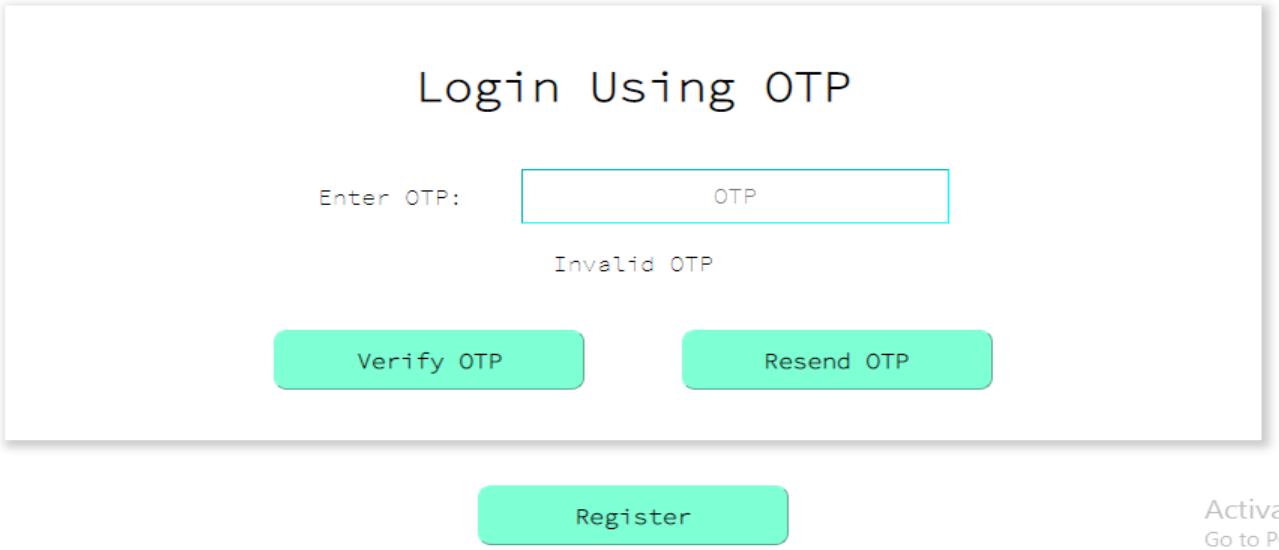


The above image represents the Login page without input. And the below image represents the login page with input.



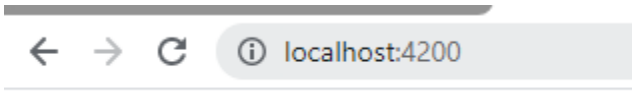
If we will provide a correct number and click on get OTP option, the website will ask for OTP. The below page represents the same.

Coder's Coffee

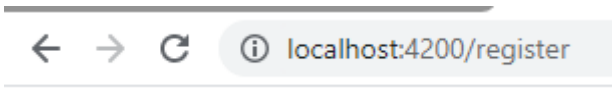


1.5 Routing

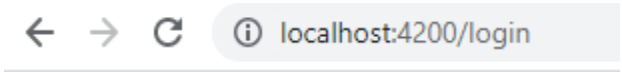
In my website, I have provided routing for different pages. Below screenshots can represent this:



The above route is for the page where we have login and register options.



The above route is for register page.

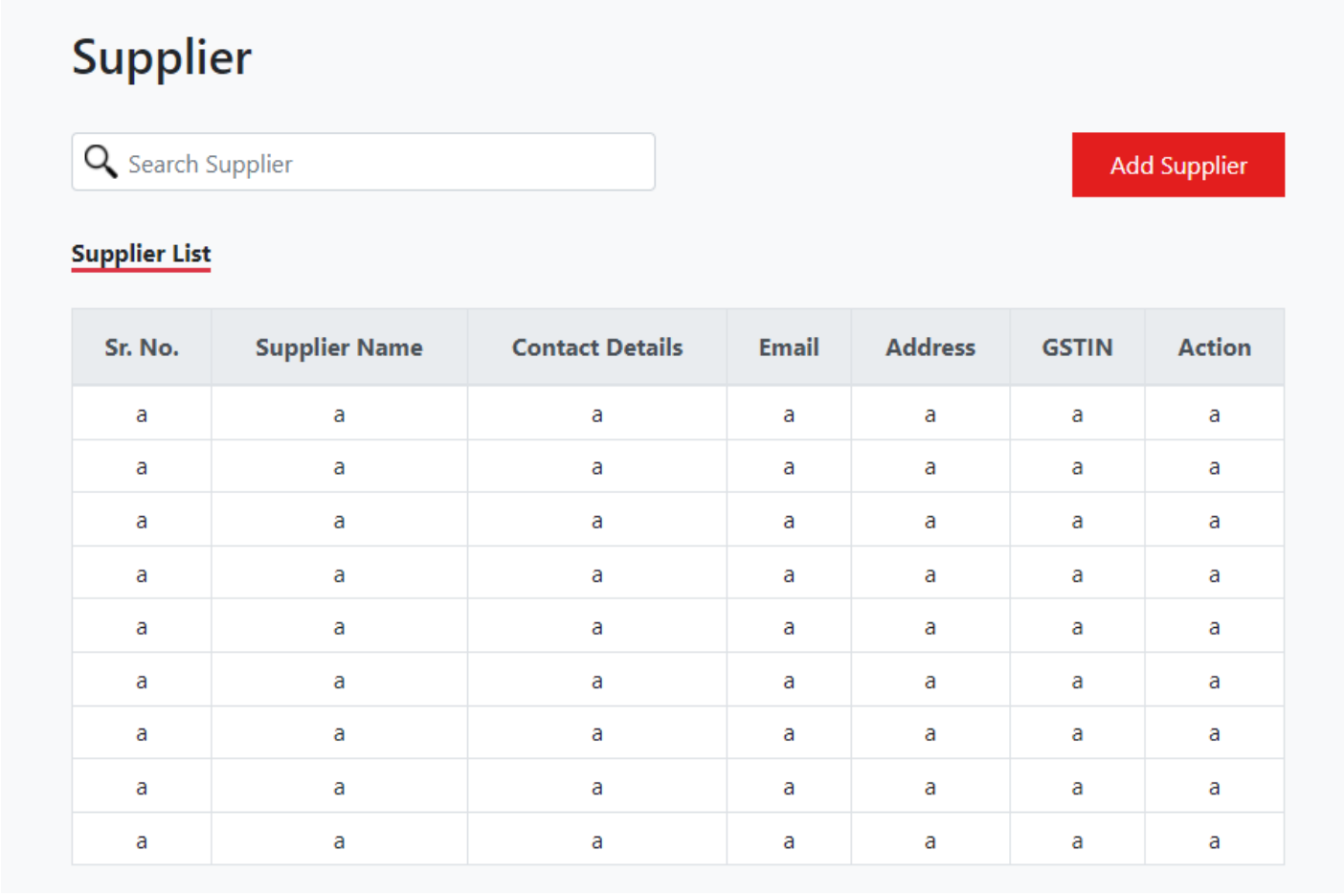


The above route is for login page.

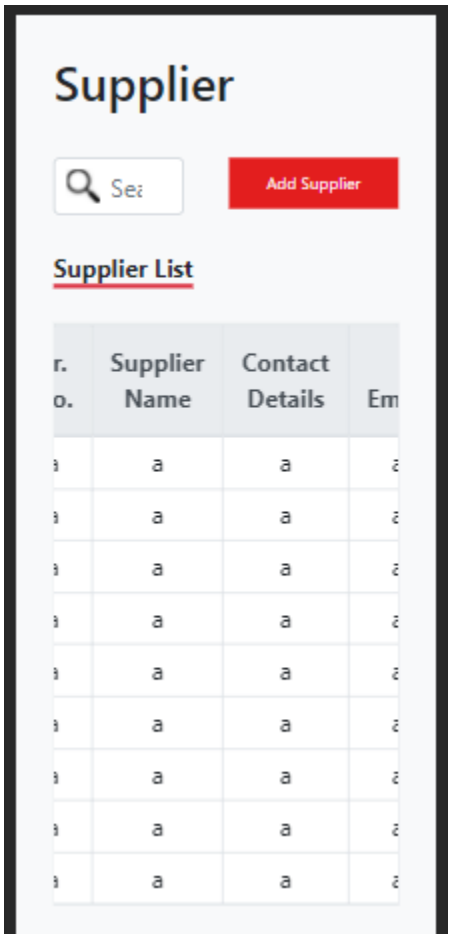
2. POSTMAN, WEB APIs AND RESPONSIVE WEB DEV

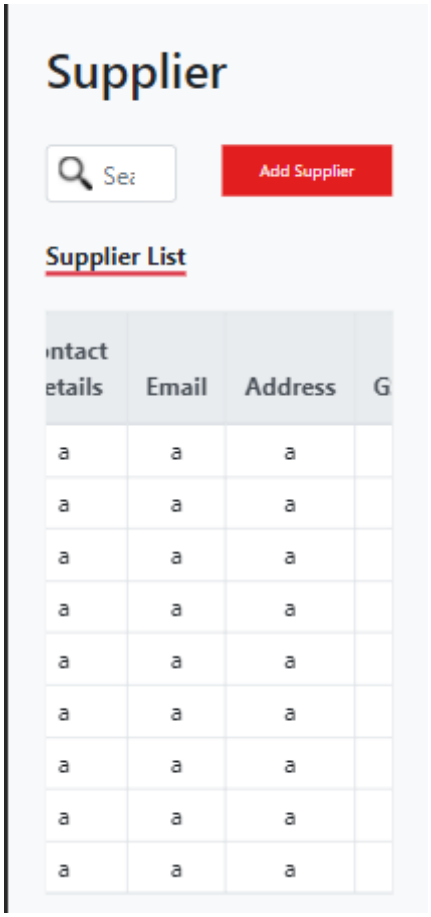
While learning Angular, I have also learned to call Web APIs.
After understanding the foundations of Angular, I was told to learn using Postman so as to start with Flask and APIs.

In the mean time, I have also created responsive web-pages using HTML, CSS and Bootstrap, they are Supplier's Page and Feedback Page for the official website of TTN garage.



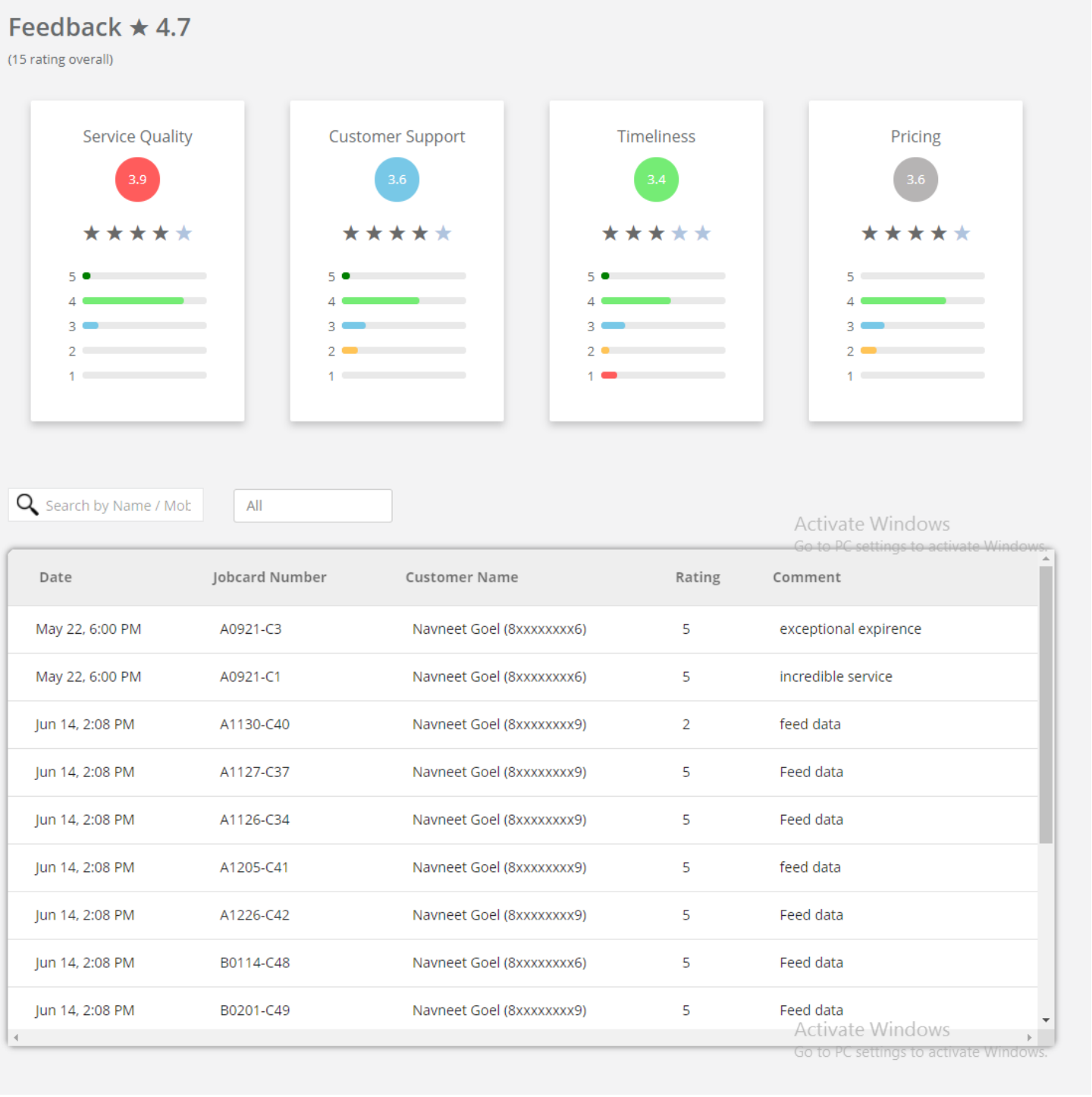
The above image is for web-view.



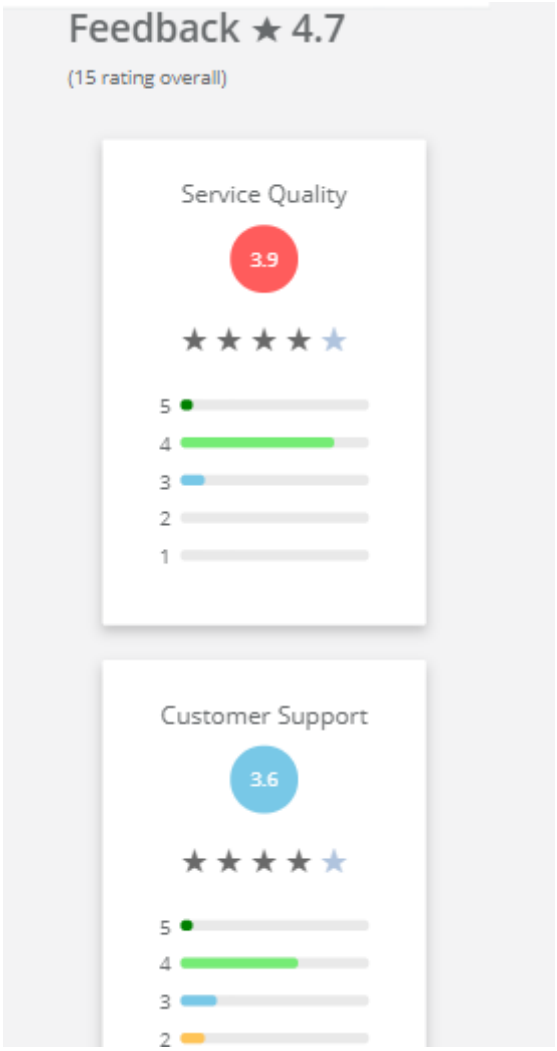


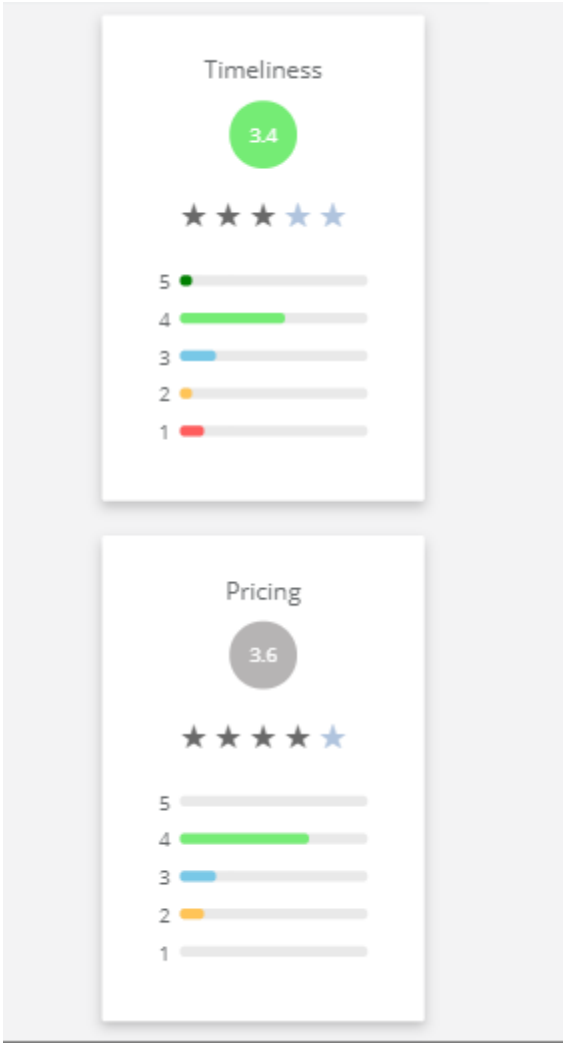
The above images are for mobile view of Supplier's Page.

And the below images are for the feedback page.



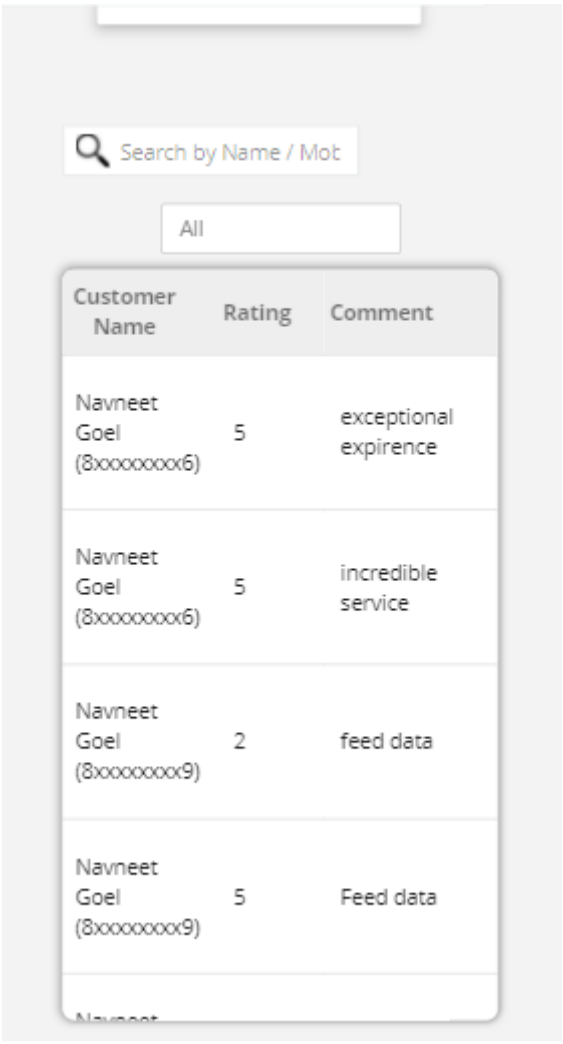
The above image is of Feedback page for web view.





The above and below images represents the responsiveness of feedback page created for the workshop (TTN Garage).


Search by Name / Mot
All
Date
Jobcard Number
Customer Name
Ra
May 22, 6:00 PM
A0921-C3
Navneet Goel (8xxxxxxxx6)
5
May 22, 6:00 PM
A0921-C1
Navneet Goel (8xxxxxxxx6)
5
Jun 14, 2:08 PM
A1130-C40
Navneet Goel (8xxxxxxxx9)
2
Jun 14, 2:08 PM
A1127-C37
Navneet Goel (8xxxxxxxx9)
5
Jun


Search by Name / Mot
All
Customer Name
Rating
Comment
Navneet Goel (8xxxxxxxx6)
5
exceptional expirence
Navneet Goel (8xxxxxxxx6)
5
incredible service
Navneet Goel (8xxxxxxxx9)
2
feed data
Navneet Goel (8xxxxxxxx9)
5
Feed data

3. FLASK

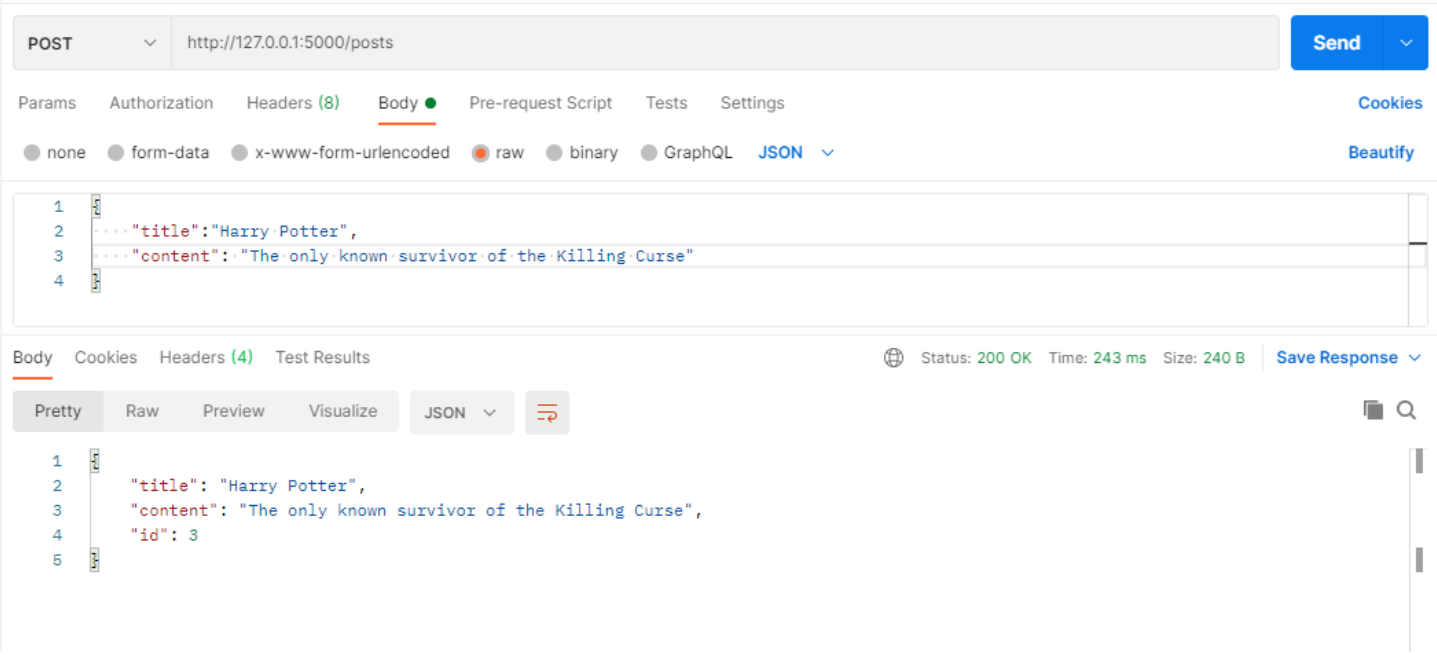
When I was learning Flask, I have created few APIs, some of them are:
1) Flask REST API for CRUD operation
2) API for Image file upload and retrieve.

Other than this, I have learned JWT authentication, SQLAlchemy ORM and use of Postman.

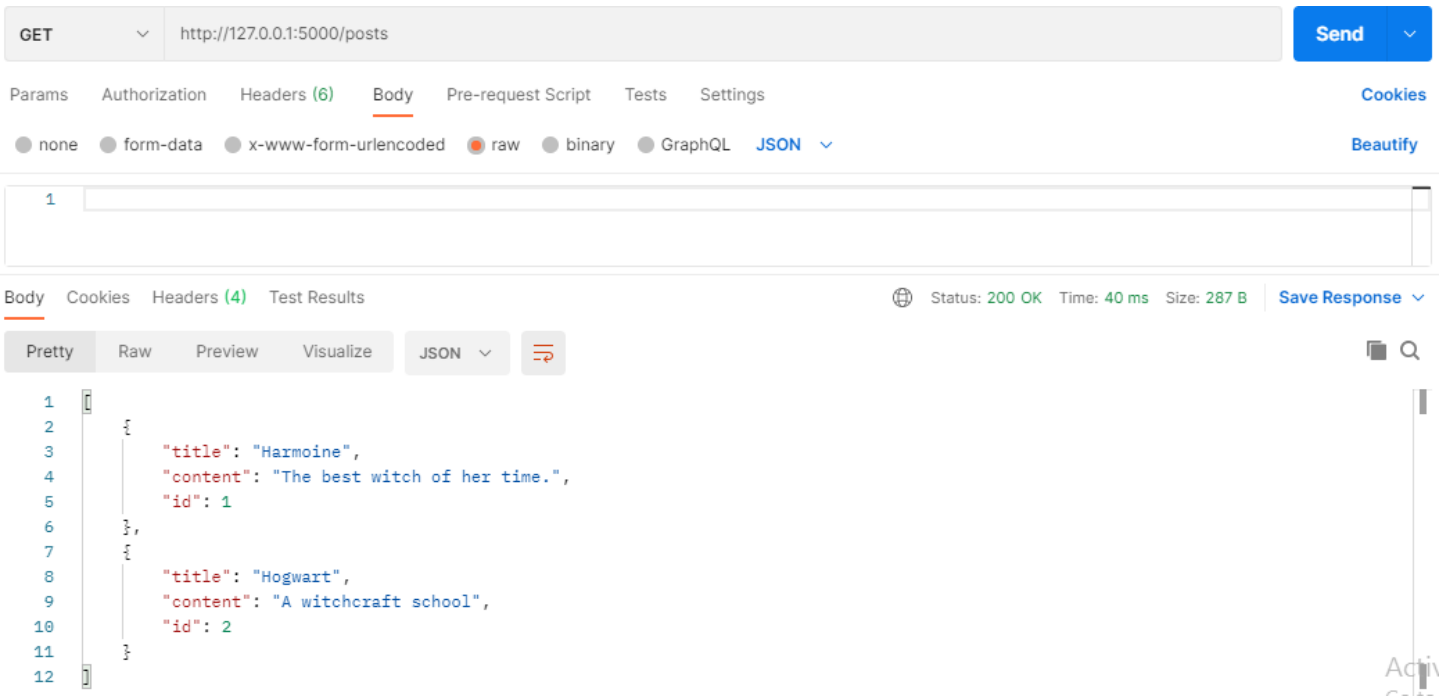
3.1 API for CRUD Operation

This API is created to learn CRUD using Flask REST API. CRUD has 4 parts: Create, Retrieve, Update and Delete.

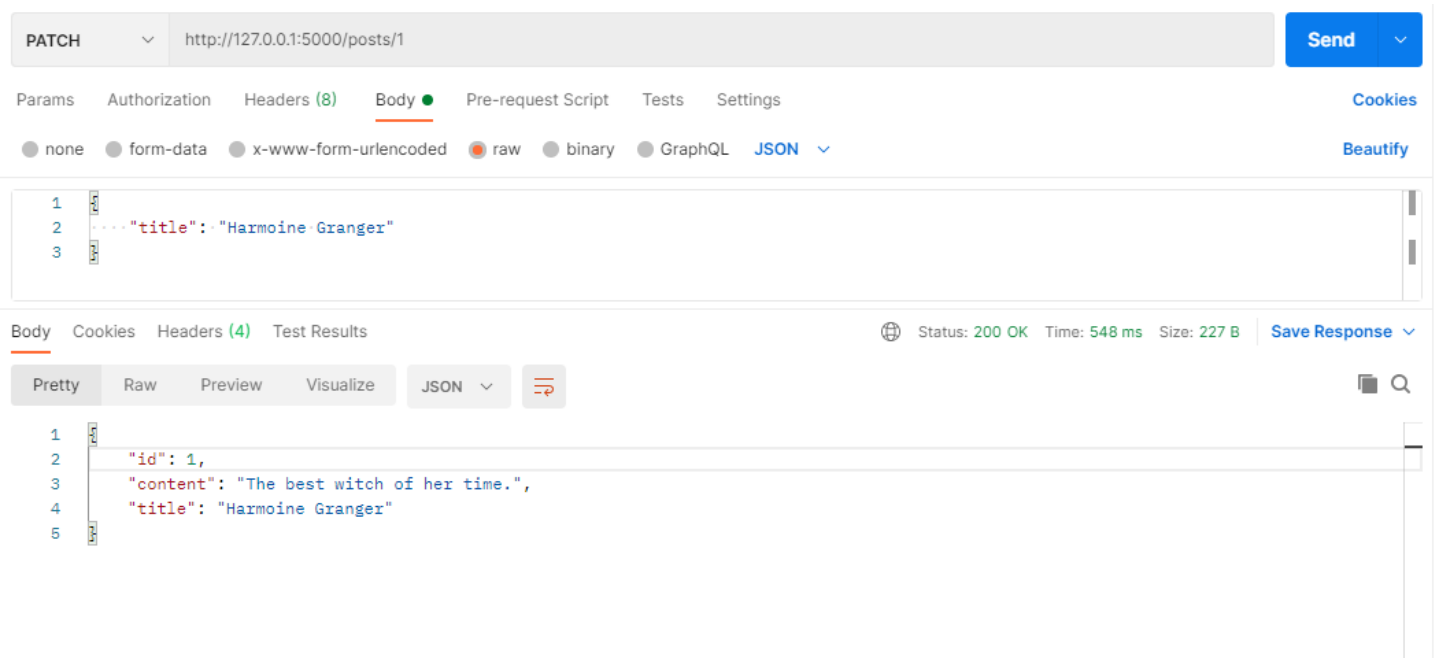
Github Repository Link: https://github.com/Aaliya7516/Flask-CRUD



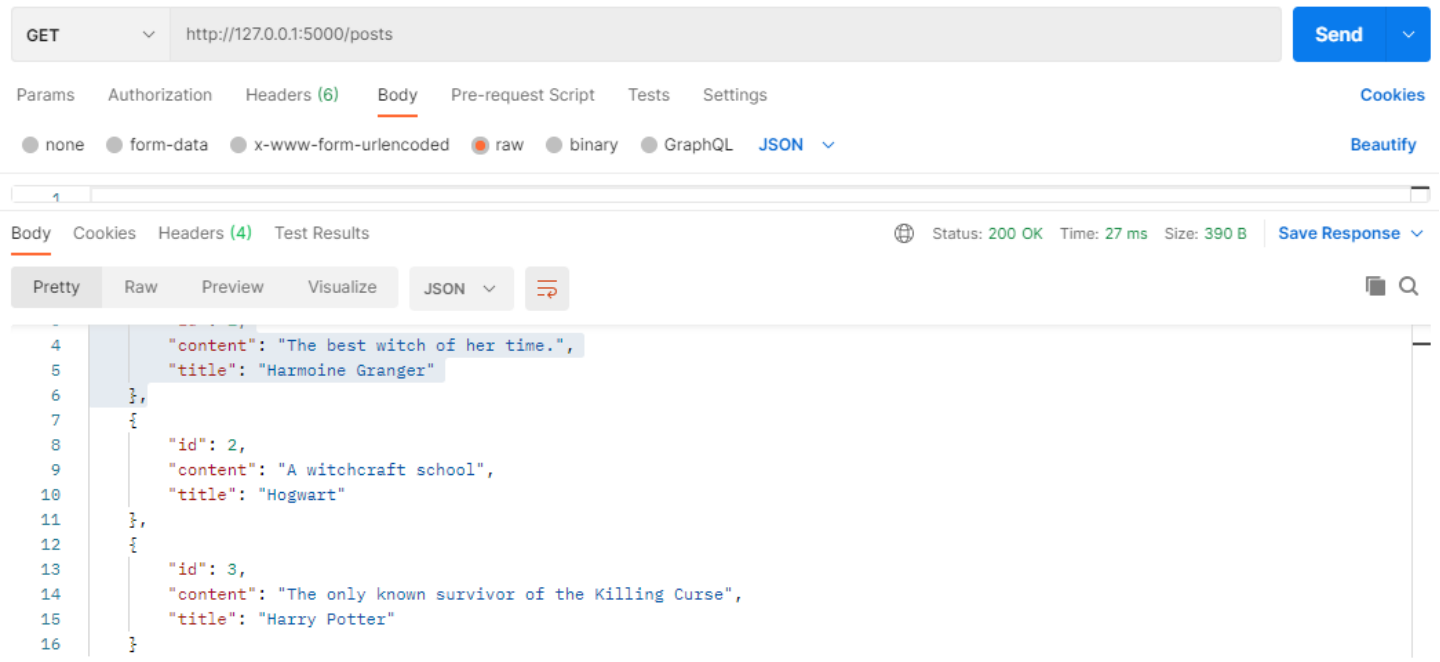
The above image represents **Create O**peration in the API.



The above image represents **Retrieve** Operation in the API.



The above image represents **Update** Operation in the API.



The above image represents the data before **Delete** Operation

The above image represents the data after **Delete** Operation.

3.1 API for Image Upload

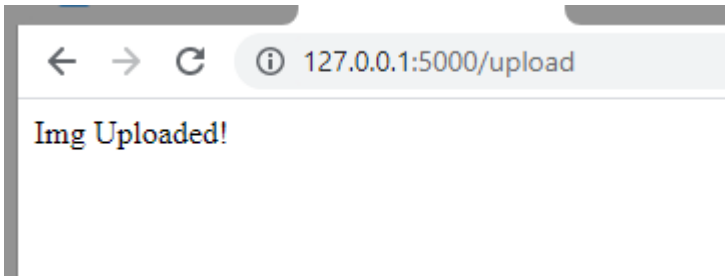
This API is created to learn Image uploading (or file upload) to Database using Flask API. Here, I have done 4 things:

1) Upload Image
2) Retrieve image
3) Give respond if the Image is already present
4) Give respond to the Id if it is not present.

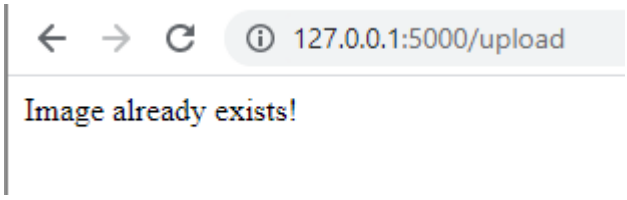
Github Link: https://github.com/Aaliya7516/Flask-File-upload

The below Images will demonstrate how this API works

The above image is of the HTML page that takes the input from the user.



The above image represents the message that will appear when the file is uploaded successfully. For file upload, we have sent POST request to endpoint ‘upload’.



The above image shows the message when Image is already present.

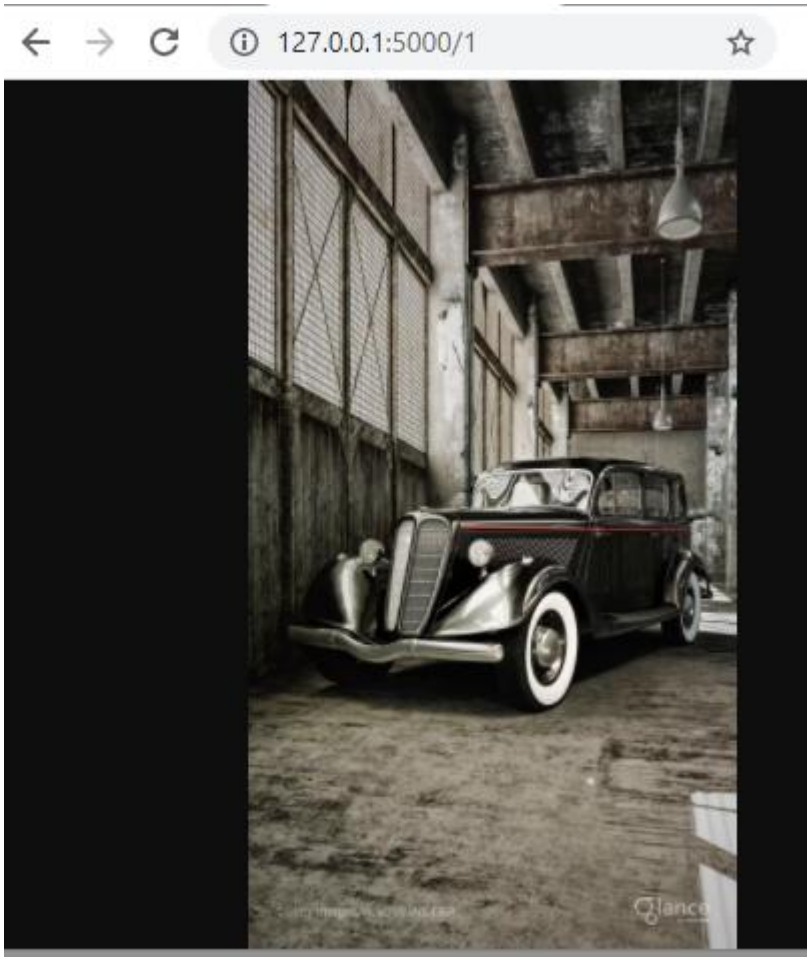
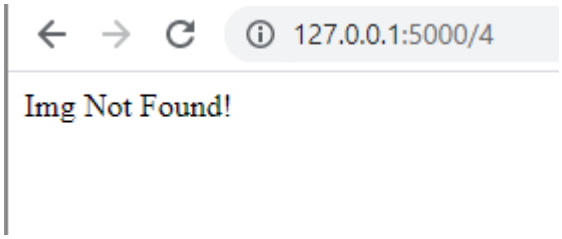


Image can be retrieved using GET request and ***Image Id*** as endpoint.



The above image represents the massage when the Image ID doesn't exist.

4. WORK ON LIVE PROJECT - TTN GARAGE

After understanding how a project works, leaning to manipulate the frontend and Backend of a project, I was given a task on the Live Project - TTN Garage.

When we are providing any service to the customer, taking their feedback is a good practice, this will help in improving our service quality. Hence, I was assigned with the task to create a complete feedback module.

It includes:

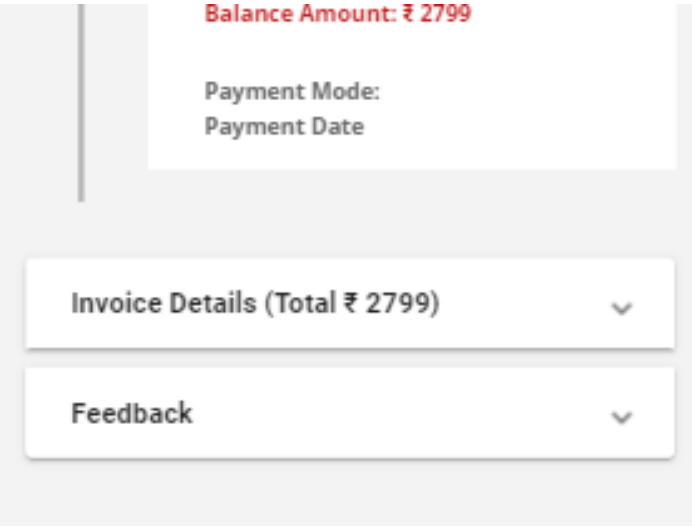
1) A feedback Form for Workshop's Customer.
2) Feedback page for Workshop.

4.1 Feedback Form For the Customer

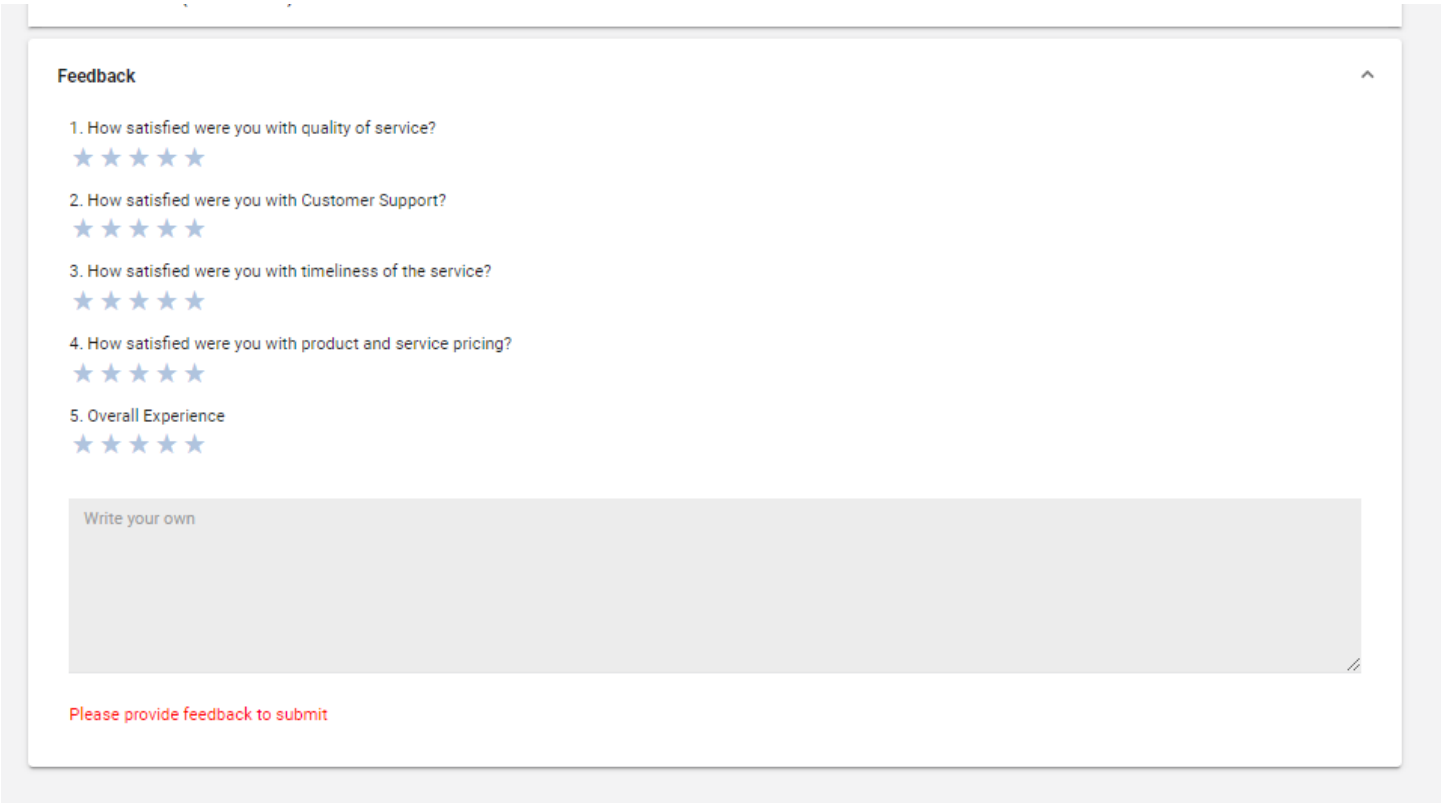
This task also had few sub-modules:

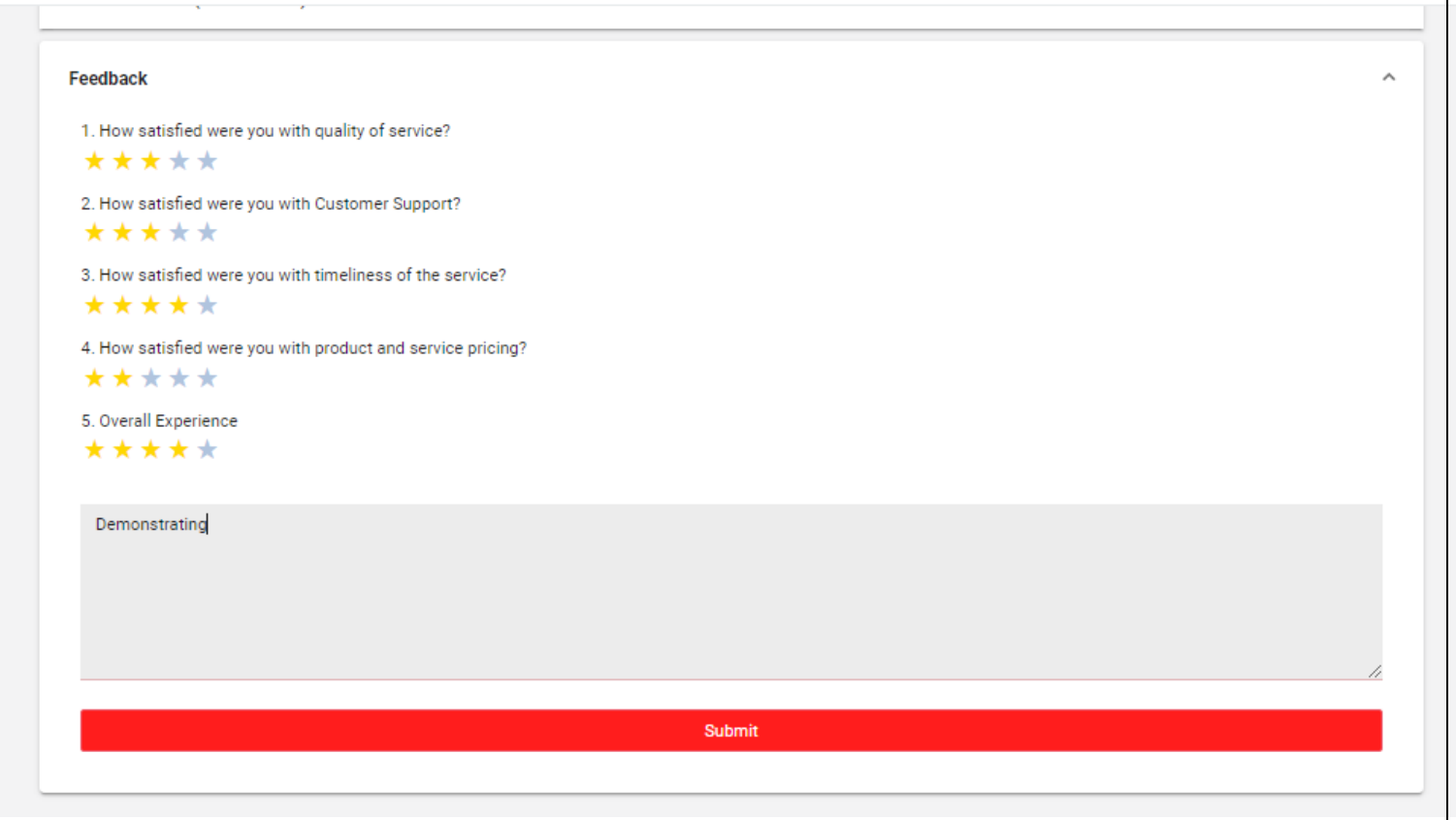
1) To create a feedback form and add this form in two parts of the project (i.e Customer register and customer login)
2) Display previous feedback, if present
3) Display overall-rating besides 'Feedback' of the Dropdown form added.
4) Finally, send the latest feedback to the server using API

4.1.1 Feedback Form

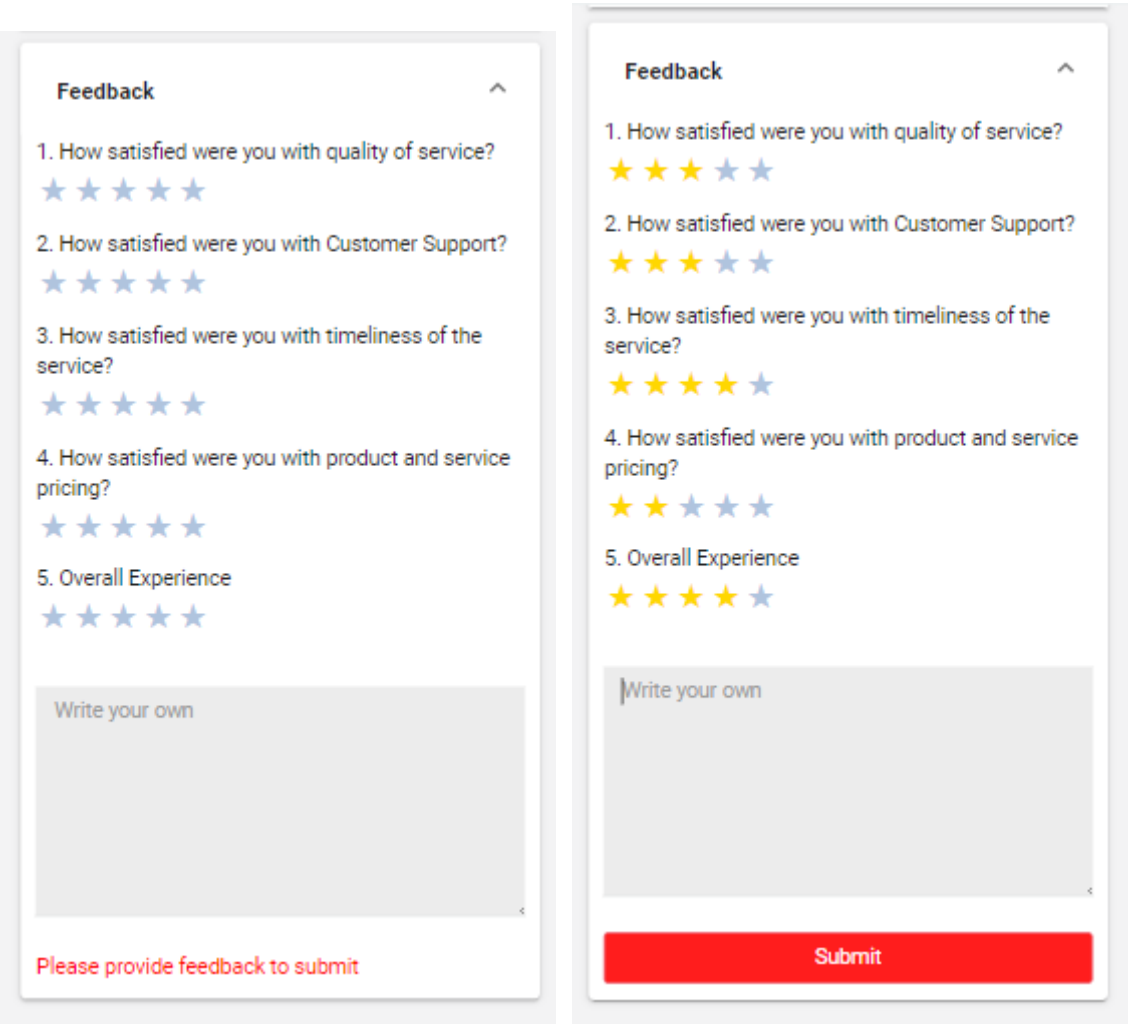


Feedback form is added in the Jobcard details Page (no previous feedback).



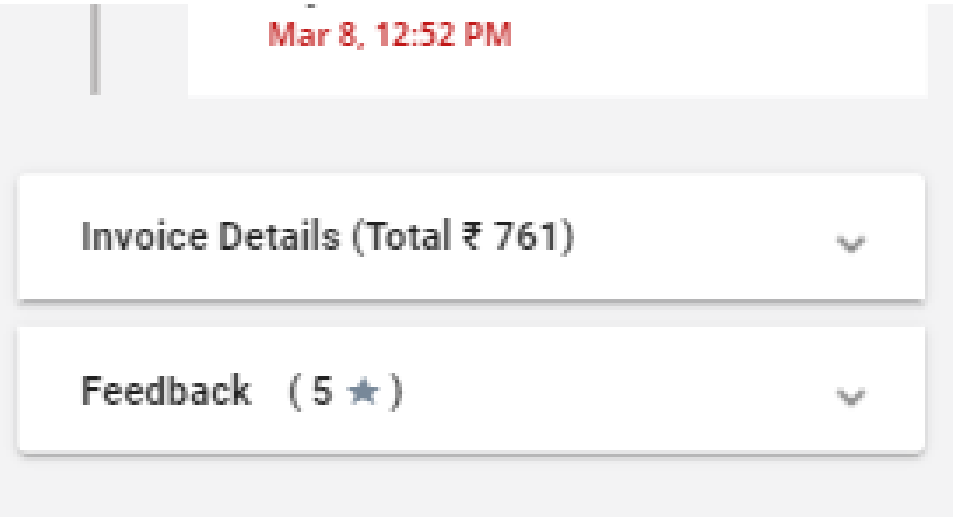


The above images represent a fresh feedback form without previous data in Web view. Here, the submit button will only appear if all the ratings are above 0 star.

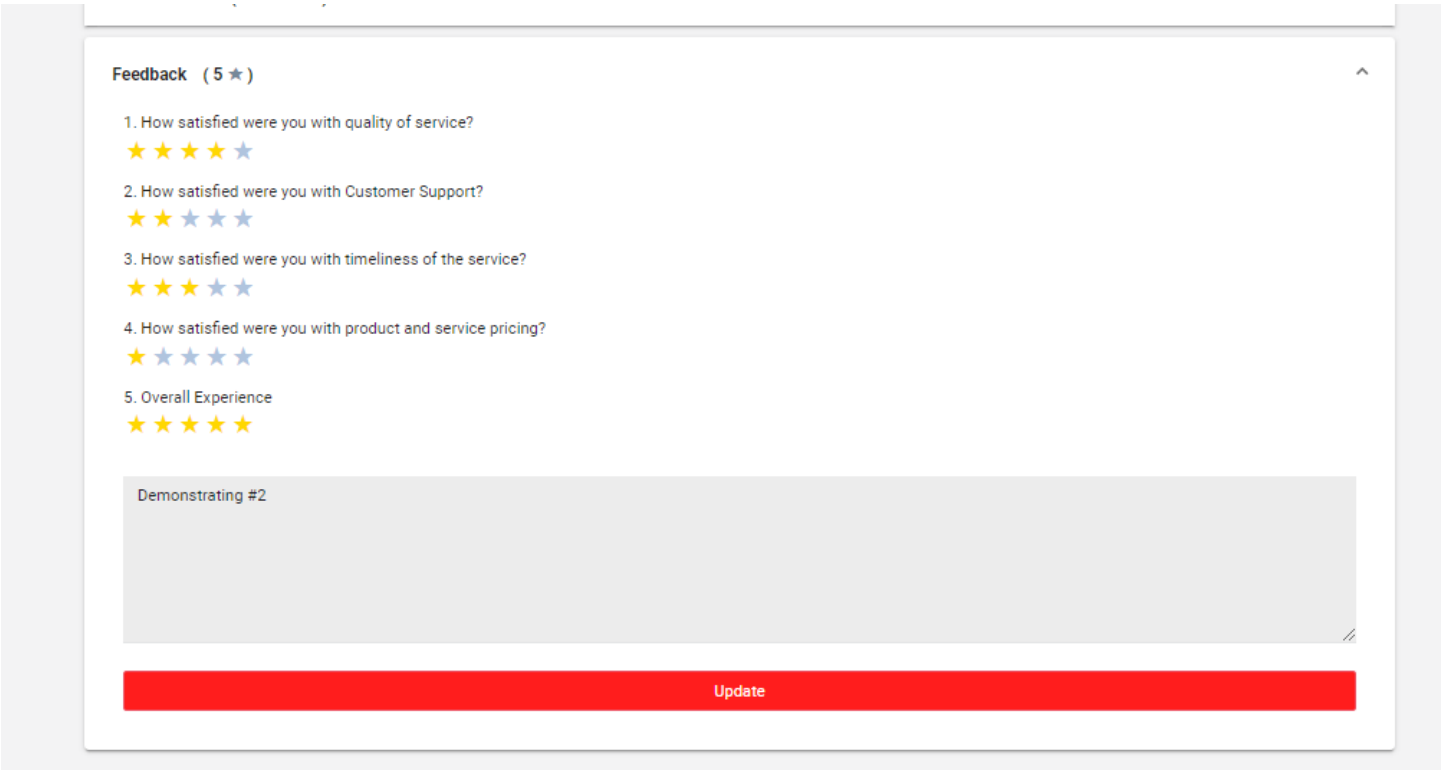


The above image shows a fresh feedback form without previous data in Mobile view.

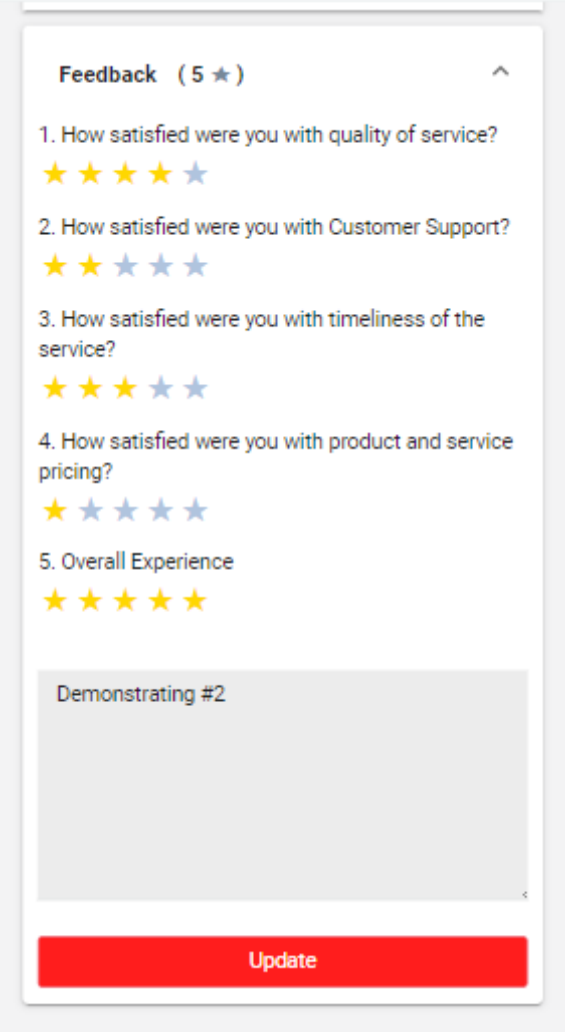
4.1.2 Display Previous Feedback



As the previous feedback is present, Overall rating is displayed besides Feedback.



Previous feedback is fetched by calling API. Instead of *Submit*, we have *Update* now. Above is a Web view of form with previous feedback.



Above image represents the Mobile View of feedback form.

Now, another API will be called to submit the new feedback.

Here, the APIs used are:

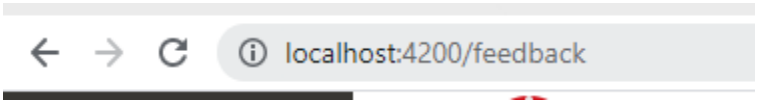
1) To fetch the previous feedback for the jobcard.
2) To send the latest Feedback to the server.

4.2 Feedback page for the workshop

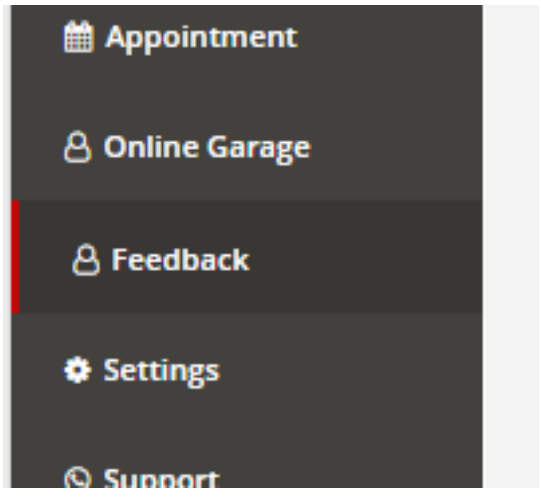
We can again divide this task into sub-tasks:

1) Created a new component for feedback page of workshop, added feedback on side layout and added a new route for it.
2) Integrate feedback list API to display the values in various places of page.
3) Integrate the API for search to avail the user to search feedback according to Name or customer mobile number.
4) Integrate the rating filter API to show the feedback of selected rating value.

4.2.1 Feedback Component and Routing

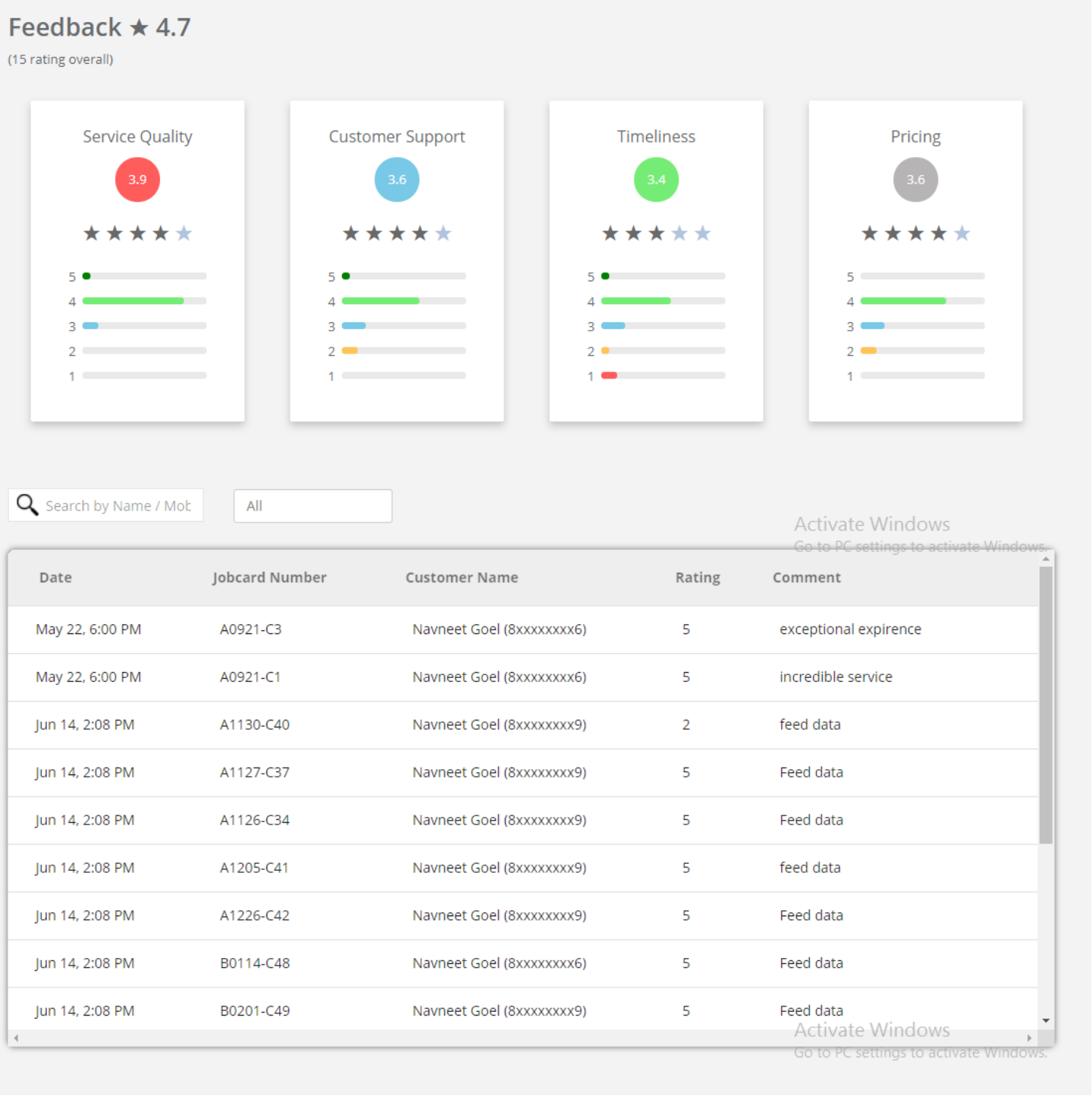


Above image demonstrates the routing for feedback module.



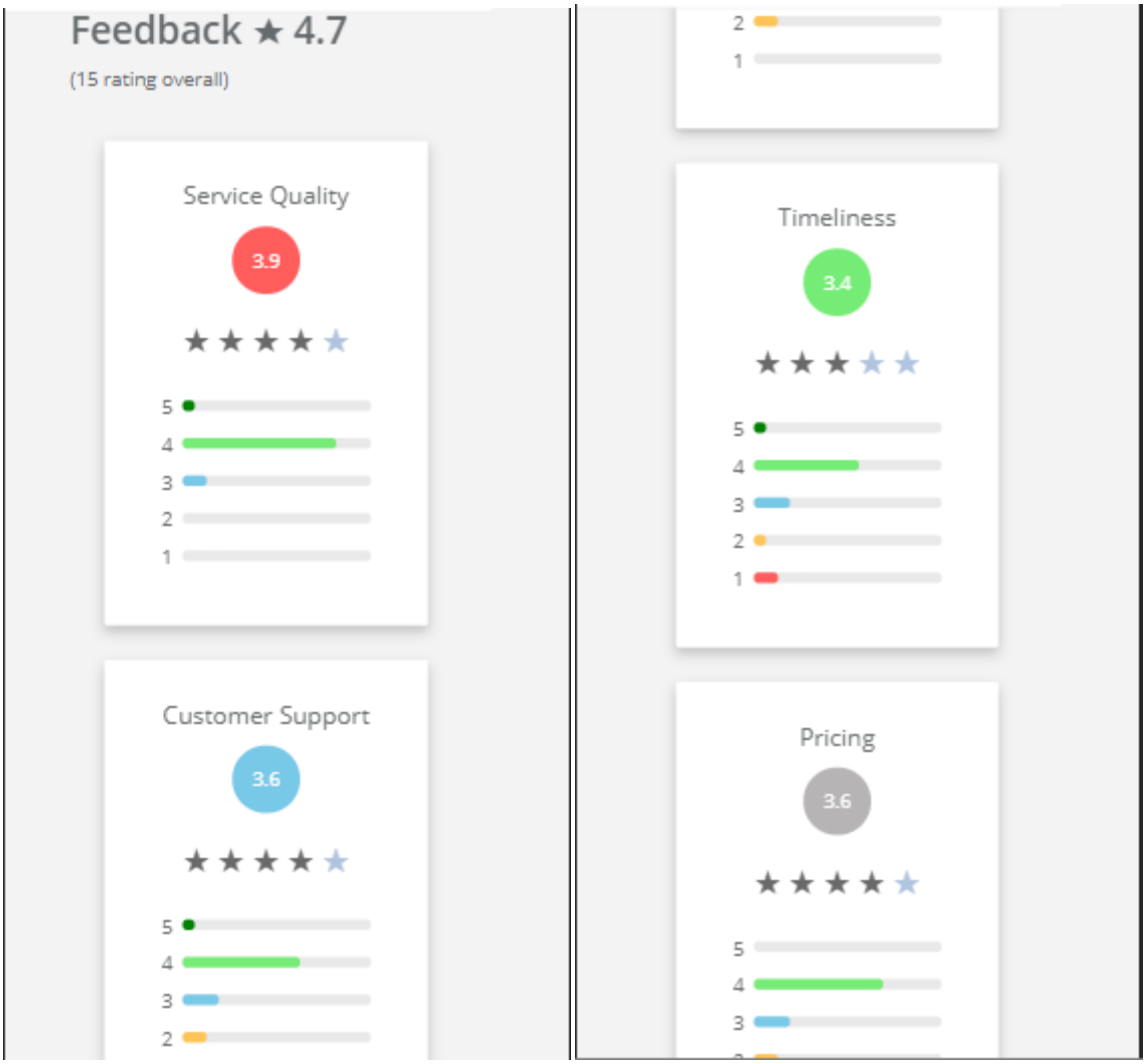
Above Image represents the integration of *Feedback* on side layout.

4.2.2 Integration of Feedback List API

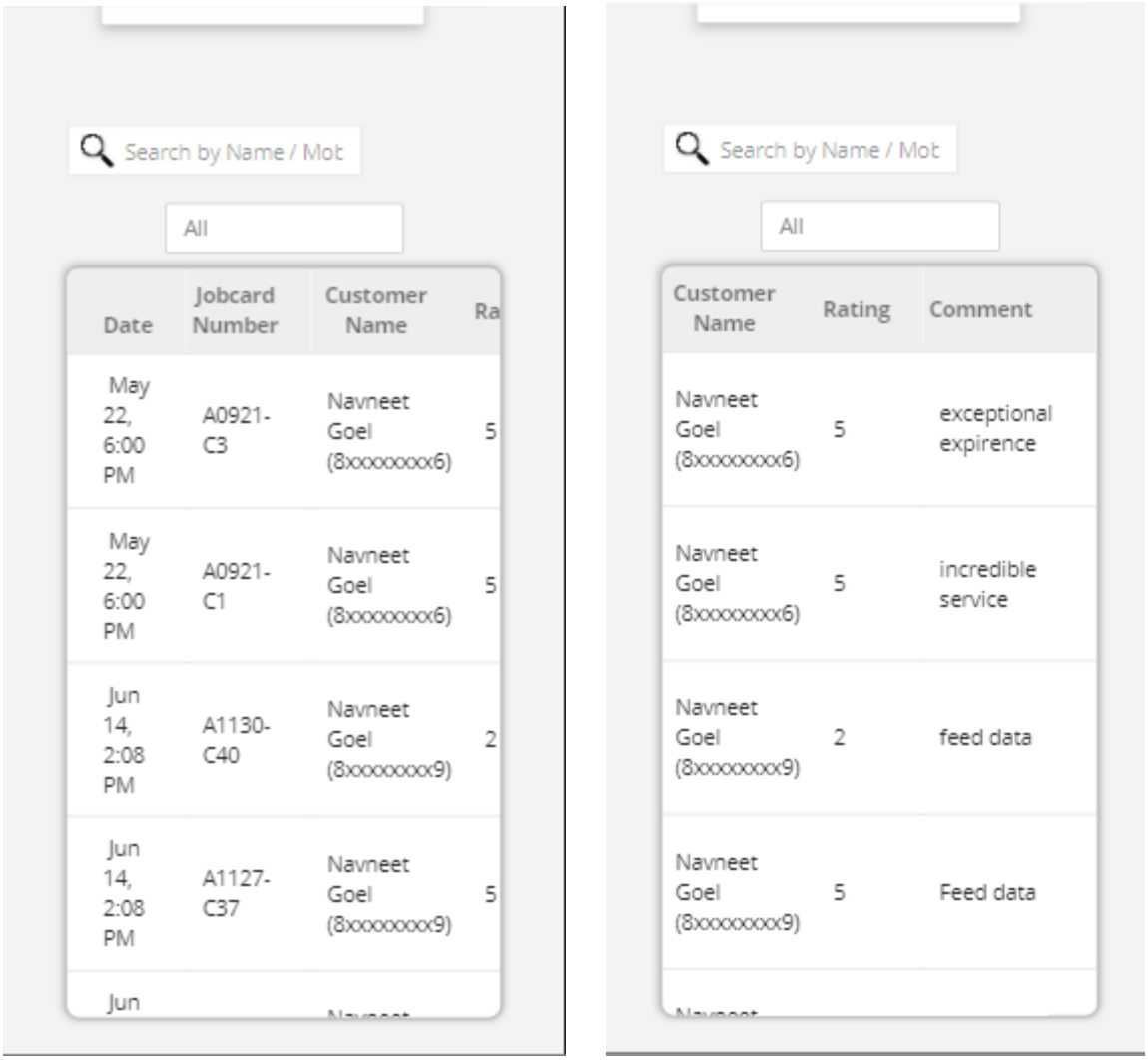


Date	Jobcard Number	Customer Name	Rating	Comment
May 22, 6:00 PM	A0921-C3	Navneet Goel (8xxxxxxxx6)	5	exceptional expirence
May 22, 6:00 PM	A0921-C1	Navneet Goel (8xxxxxxxx6)	5	incredible service
Jun 14, 2:08 PM	A1130-C40	Navneet Goel (8xxxxxxxx9)	2	feed data
Jun 14, 2:08 PM	A1127-C37	Navneet Goel (8xxxxxxxx9)	5	Feed data
Jun 14, 2:08 PM	A1126-C34	Navneet Goel (8xxxxxxxx9)	5	Feed data
Jun 14, 2:08 PM	A1205-C41	Navneet Goel (8xxxxxxxx9)	5	feed data
Jun 14, 2:08 PM	A1226-C42	Navneet Goel (8xxxxxxxx9)	5	Feed data
Jun 14, 2:08 PM	B0114-C48	Navneet Goel (8xxxxxxxx6)	5	Feed data
Jun 14, 2:08 PM	B0201-C49	Navneet Goel (8xxxxxxxx9)	5	Feed data

Above image represents the data that is fetched form the Backend; the image is in desktop view.

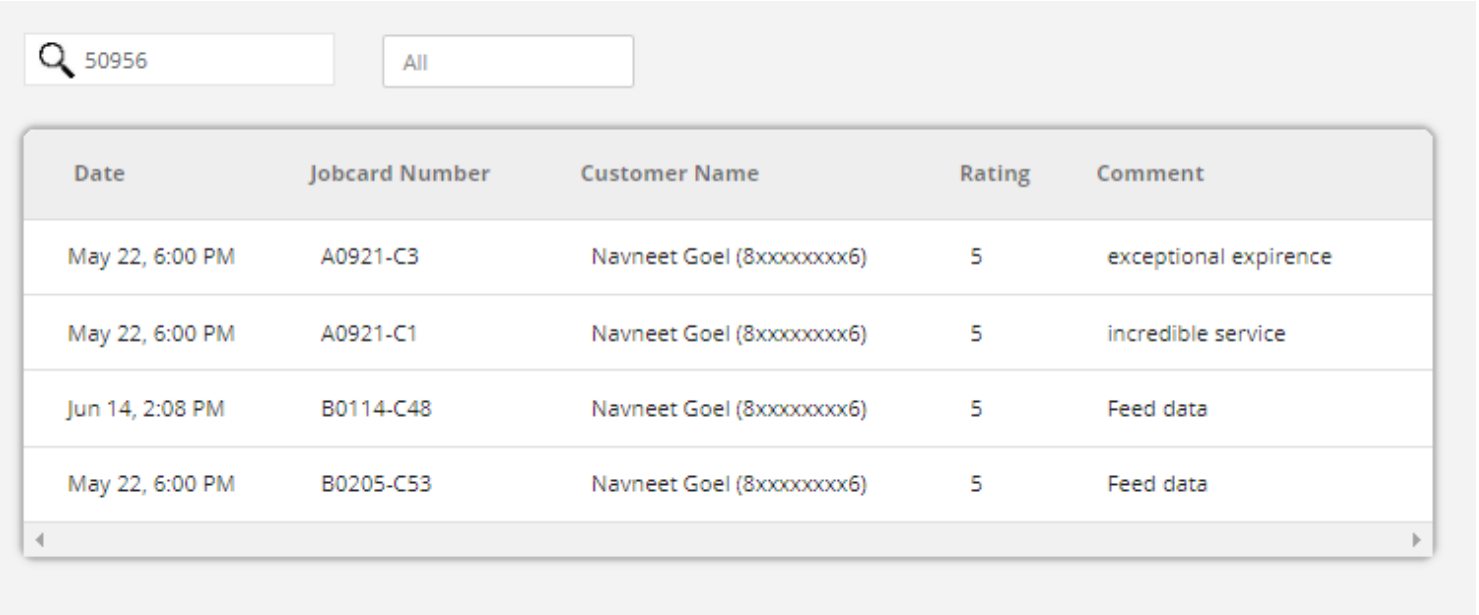


The above image represents the feedback page of workshop in mobile view.

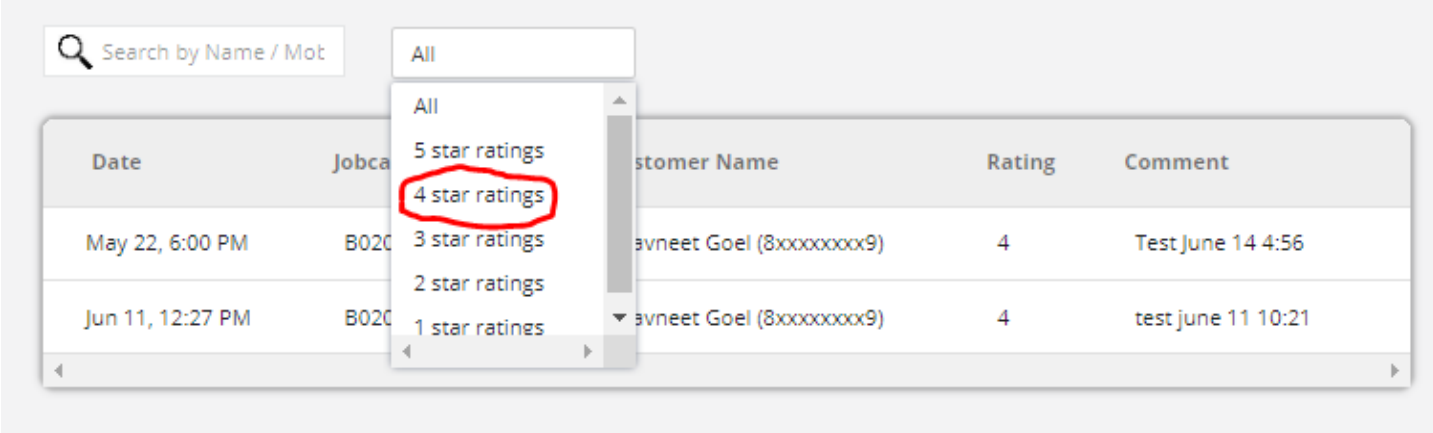


The above image represents the responsiveness of table of feedback page in mobile view.

4.2.3 Integration of various filter APIs



From the above image, we can understand the functioning of search filter.



From the above image, we can understand the functioning of rating filter. Here, I have selected 4 star rating, therefore, the feedback having 4 stars have been displayed. Similar function will work for other ratings as well. And if there is no date of some rating, then the table will not be modified from its previous state, and a message will come, saying '*No data*'.

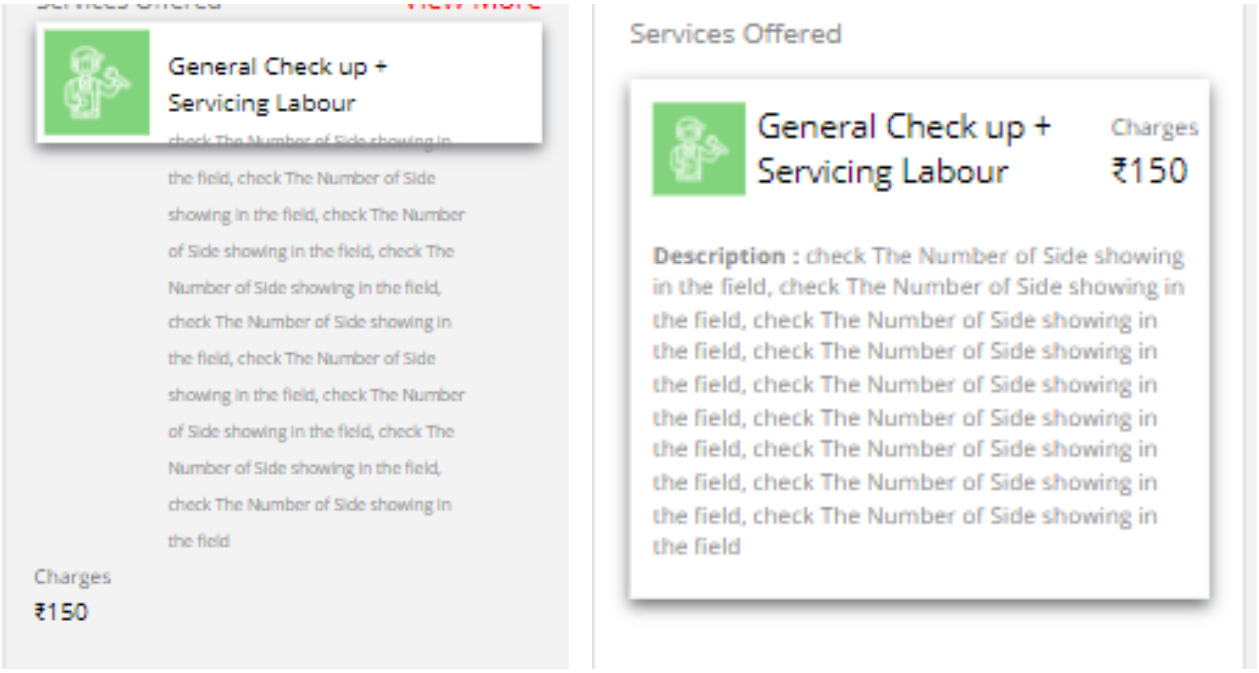
4.3 Minor Changes

There was some issue with the cards in services page, under '*Services Offered*' and the card contents was coming out of the card.

Below images show the before and after views of the card.

Desktop view **before** changes

Desktop view **after** changes



5. CHALLENGES FACED

1. Had to learn everything from very beginning. By this, I got to learn a complete structure of a website and how it works.
2. It was quite challenging to work on someone else's code for the first time. But it helped me to understand and deal with complex structure of code of a big project.
3. During my internship, there were some tasks that took time to research for them and apply them in the project. But at the end, I am able to do the same task in relatively lesser amount of time.
4. Being an Intern was something completely new for me, but my seniors helped me a lot in understanding the processes, and were always there to help me. This taught me to work in a team.
5. Once, during my training, I felt like I am a slow learner, but my senior motivated me and told me that in the beginning everyone is slow, we should just focus on what we are doing.