iJRASET
International Journal For Research in Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 9 **Issue:** VII **Month of publication:** July 2021

DOI: https://doi.org/10.22214/ijraset.2021.36438

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429
Volume 9 Issue VII July 2021- Available at www.ijraset.com

Automobile Online Service Portal

Mohd Saad Umair Ansari[1], Mayur Chaudhary[2], Aayush Agarwal[3]
[1, 2]*Students,* [3]*Assistant Professor, Department of Computer Science and Engineering AKTU, CSIT, Dronacharya Group of Institutions, Greater Noida, U.P., India*

Abstract: ***In Today's era where almost everything has moved their services online. Delivery of Groceries, Food, Electronics, and even Furniture have adopted smart ways to provide services. The approach is to provide a portal that will help in the reduction of manual tasks as much as possible. The goal is to bring service providers and customers on one platform. This Portal if modified, can also be used by other service providers that work based on appointment. Dealers can list their features along with their prices. For better interaction with customers, Portal also provides Customer Feedback and Customer Grievance, both are one on one services that are helpful in productivity and customer relationship. So, the simple approach is providing a system that will reduce the manual tasks, for instance, customers can book an appointment as necessary and the service provider will a time slot accordingly. Implementation is web-based.***

Keyword: Automobile Service Portal, Web-based Portal, Online Service Portal, Web-App, Full Stack Portal.

I. INTRODUCTION

As we all are aware of our current situation during the pandemic. We can't gather in one place; we have to maintain social distancing and follow the guidelines to protect ourselves. We must have to upgrade our traditional ways so that we can work without affecting others. Many businesses have achieved the growth of many years during the pandemic, apps like Zoom, Zomato, Microsoft Teams, Google Classroom, and social media apps are the example of tremendous growth during the pandemic. Health-related apps have also shown a surge in their growth. Digital Payment apps as well have grown at a very big rate. The point is those who were providing their services online have shown excellent growth during the pandemic except for Transportation services because of restrictions. Let's take the example of Zoom, we can see its growth in **Figure 1.** Apps-wise growth can be seen in Figure 2.

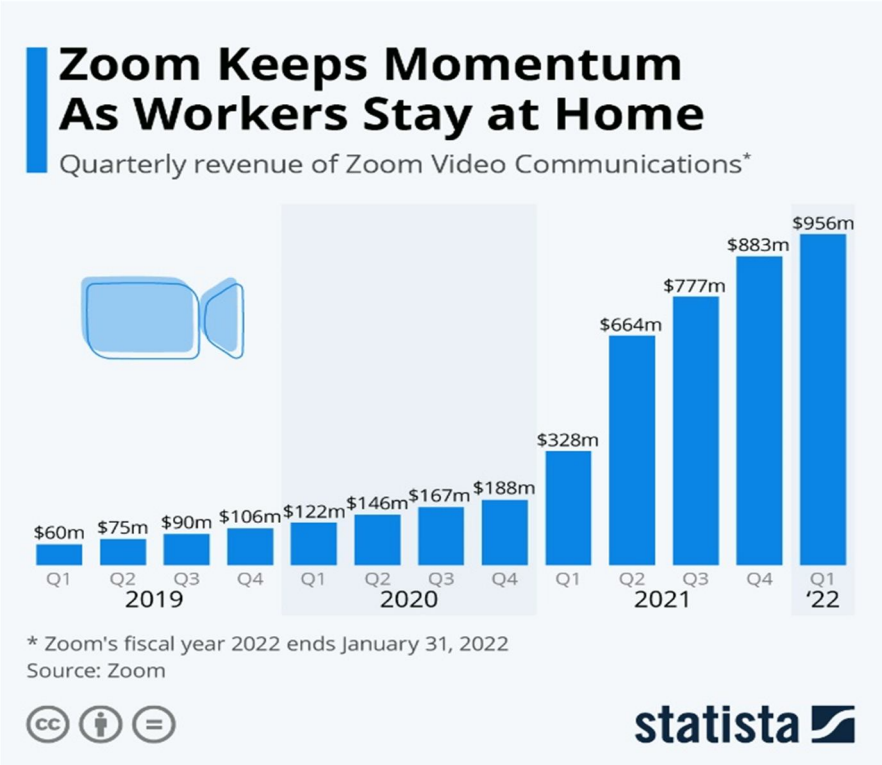


Figure 1: Zoom's growth during the pandemic.

©IJRASET: All Rights are Reserved

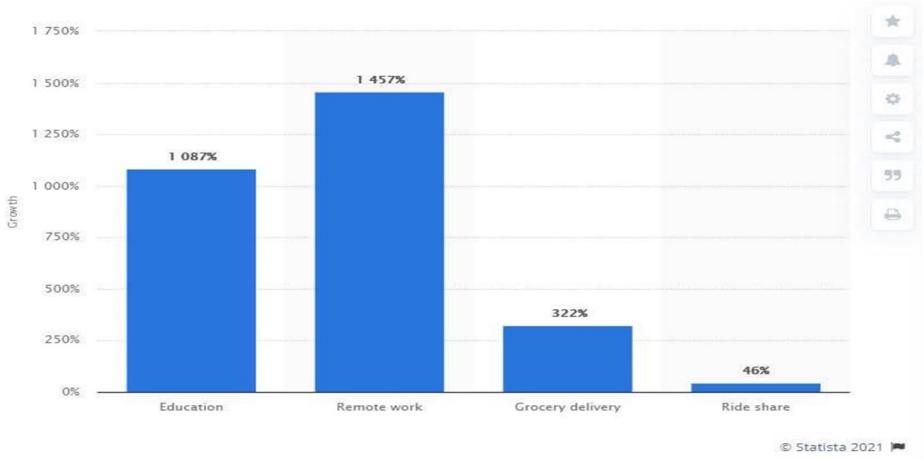


Figure 2: App-wise growth of apps during the pandemic.

These charts show how things or services that have adopted the newest ways to connect with people can be beneficial for their business. One thing to take care of is the system

This portal can be used by any service provider that works based on appointments.

This Online Portal is providing a simple approach to connect with customers. Customers have to create an account for accessing the services. After that, the user can register for services that are listed by the service provider. Users can select the date of service; its availability can be verified by an admin of the portal. For better engagement with the customers, there is Customer Feedback and Customer Grievance availability. This AUTOMOBILE ONLINE APPOINTMENT PORTAL will be helpful for businesses to connect with their customers and provide them an easier way to connect and use the services. As we have seen how connectivity proved its worth in the pandemic. There's an exponential growth of businesses. To avoid false appointments, a payment gateway is used. So basically it's like pre-booking the service, it is similar to what we have seen with most of the online service portals like movie ticket booking, etc. It's a full-stack web-based portal. Java, Servlet, and JSP are used in the backend, and for the front-end, HTML and CSS are used. Web-based implementation breaks the limitation of platform exclusiveness or platform availability.

II. METHODOLOGY

A. Front-End Or Interface

The front-end or interface is developed using HTML and CSS. HTML is used for structuring the body of the webpage whereas CSS is used for styling the webpage. Web-based implementation doesn't require the user to install the app, it just needs a browser. It's implemented as a web app. It can be used to check the response of customers. Cross-platform availability provides insights into the usage of the service platform-wise.

HTML structuring of this project is also simple and we have to try to make it simplistic and minimalistic for usage. CSS styling is also implemented at a very modest level.

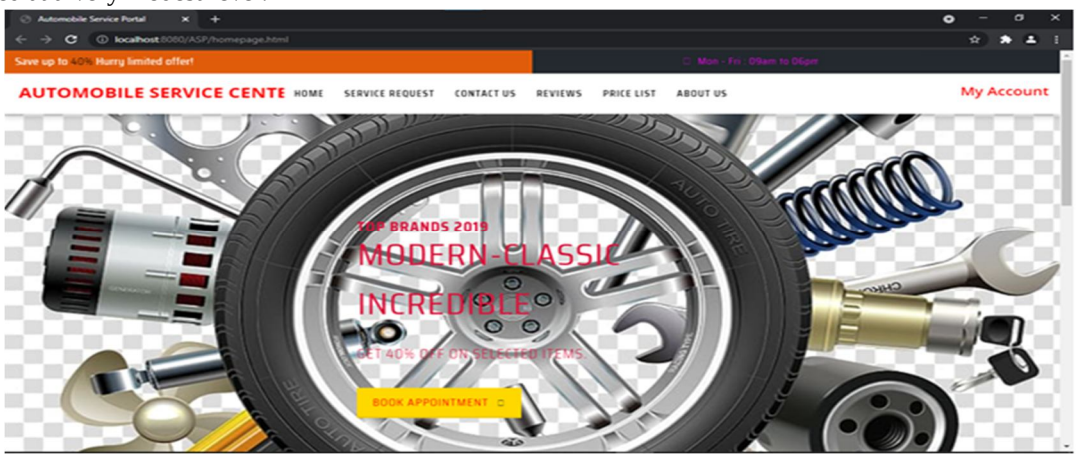


Figure 3: Homepage for a new user or signed out user

©IJRASET: All Rights are Reserved

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429
Volume 9 Issue VII July 2021- Available at www.ijraset.com

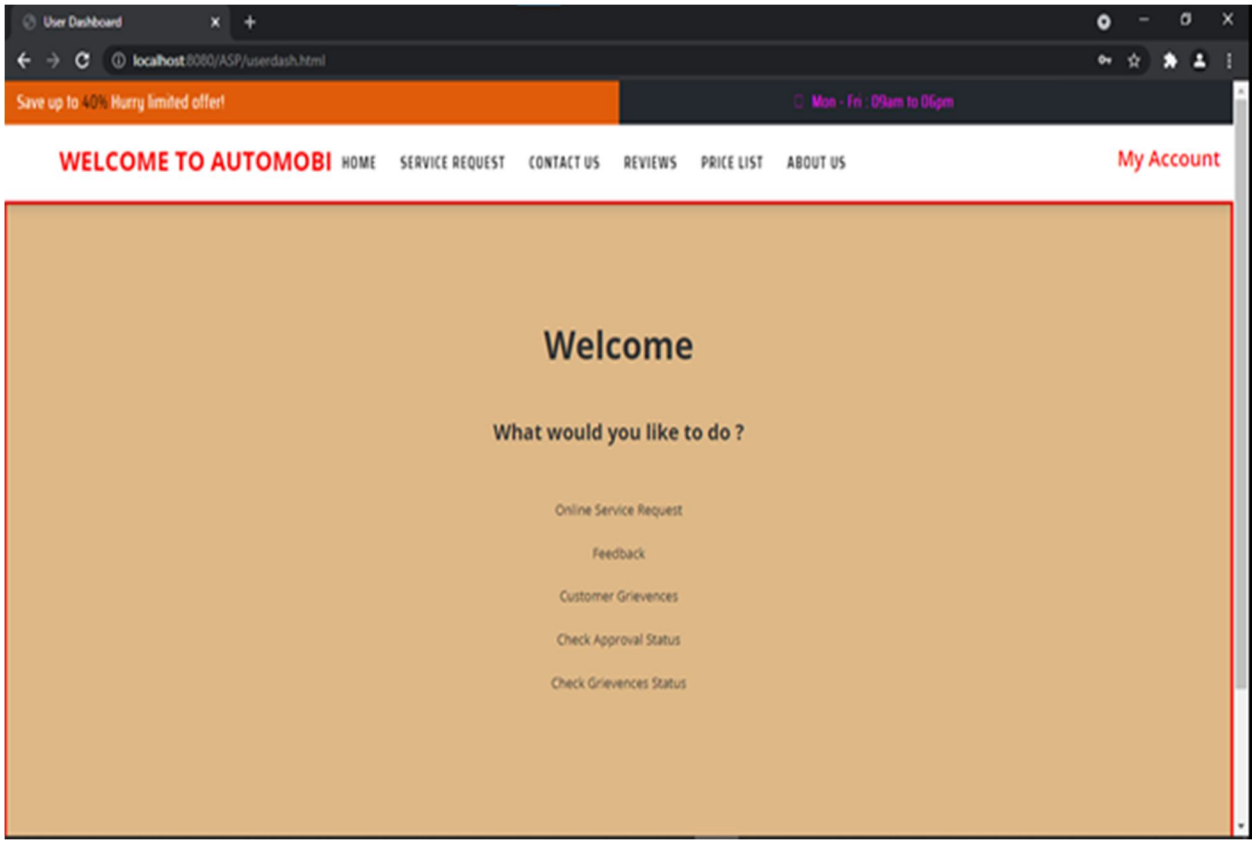


Figure 4: Homepage after Signed in.

Both figures show the Homepage for returning users (in Fig. 4) and the homepage for a signed out or new user in (Fig 3). Hovering the cursor over *MY ACCOUNT* will show the options signing in, signing out, and registering as a new user.
Users can request a service, Provide Feedback, Customer Grievance, Check Approval Status of request and Check Status of Grievance.

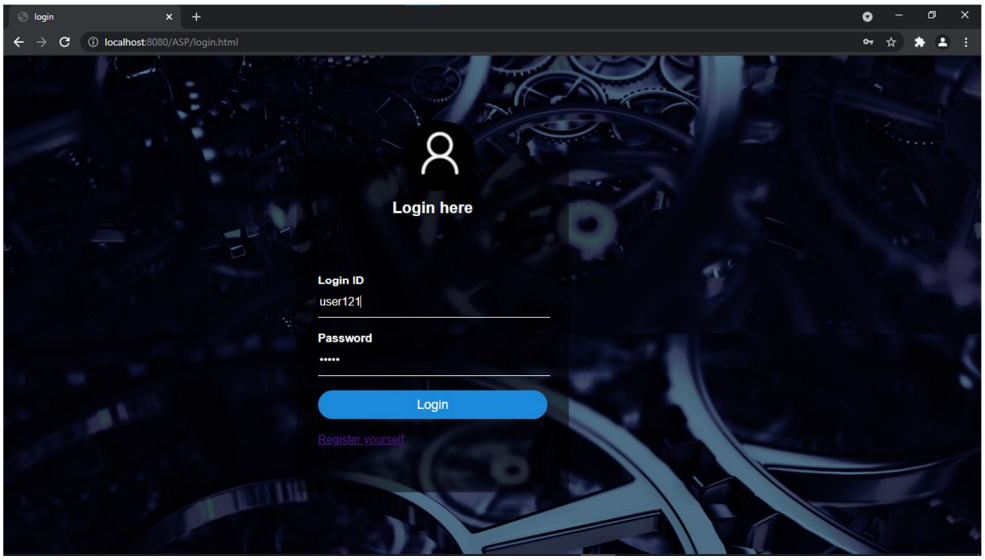
B. Backend

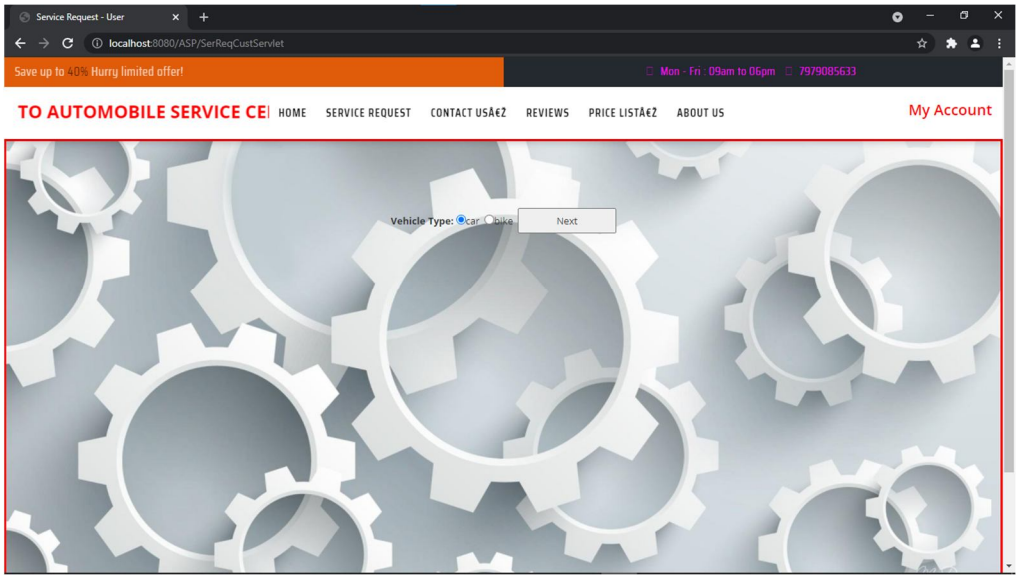
The backend of this portal is done with the help of JAVA, SERVLET, JSP, and MySQL. As we know HTML is not a programming language, to fill this we use these languages on the backend and storing user data or database connectivity MySQL and Tomcat servers are used.
Servlet is used for the extension of the abilities of the server for the request and response model. It provides a mechanism for sending content to the client, it provides robustness. Simply, it is used for the generation of dynamic content. Dynamic content is different for different users. This dynamic nature of a webpage is achieved by Servlet.
For Databases, MySQL is used for creating and storing data. MySQL provides is a secure database since it provides Encryption. All the data created in MySQL is strongly encrypted, which means unauthorized access of the data is hardly possible.
A new user has to provide its NAME, EMAIL ADDRESS, PHONE NUMBER, ADDRESS, and set a password for registration. These details like Phone numbers help in solidifying the identity of the user and it reduces the fake users that further prevents fake appointments that are quite helpful and healthy for the service provider as well as the customer.
After Registration, the User can log in. To request a service customer have to select its vehicle type and choose from the service available for the vehicle type then choose a time slot, Following these steps the user has to pay for the service or we can say that customer has pre-booked their service. After this user will receive a service ID and then the user/customer can go to have their service.
For customer engagement, there is a review page that is public to all visitors of the webpage and for personal complaint/Grievance, there is a dedicated grievance section.

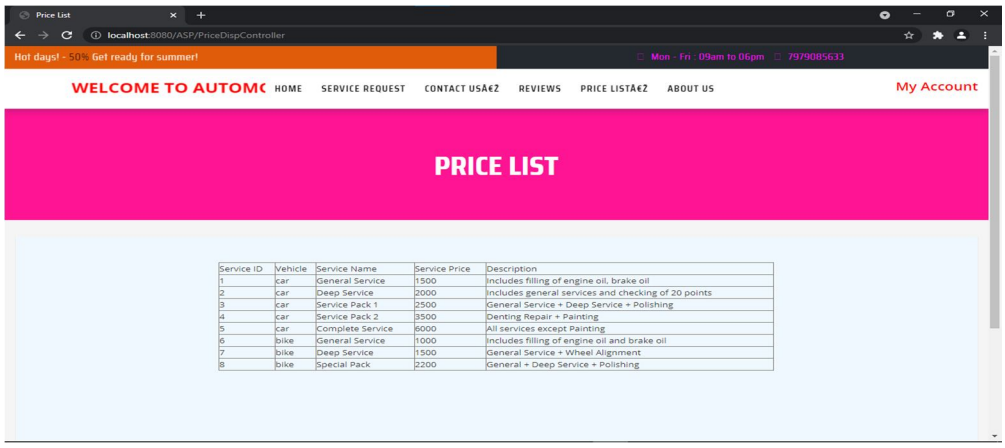
©IJRASET: All Rights are Reserved

III. RESULT

This portal provides a user-friendly, minimalistic design to the user. Below there are snapshots of the portal is given:

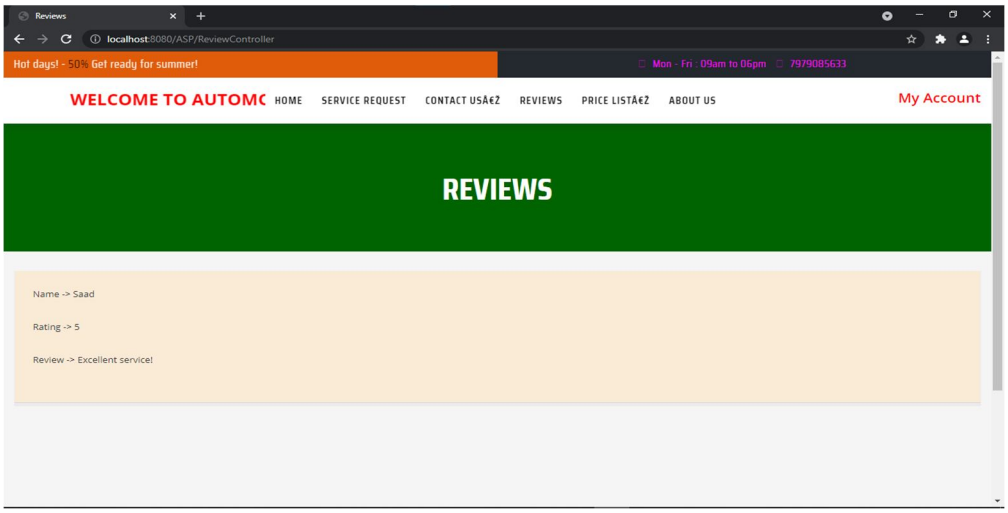


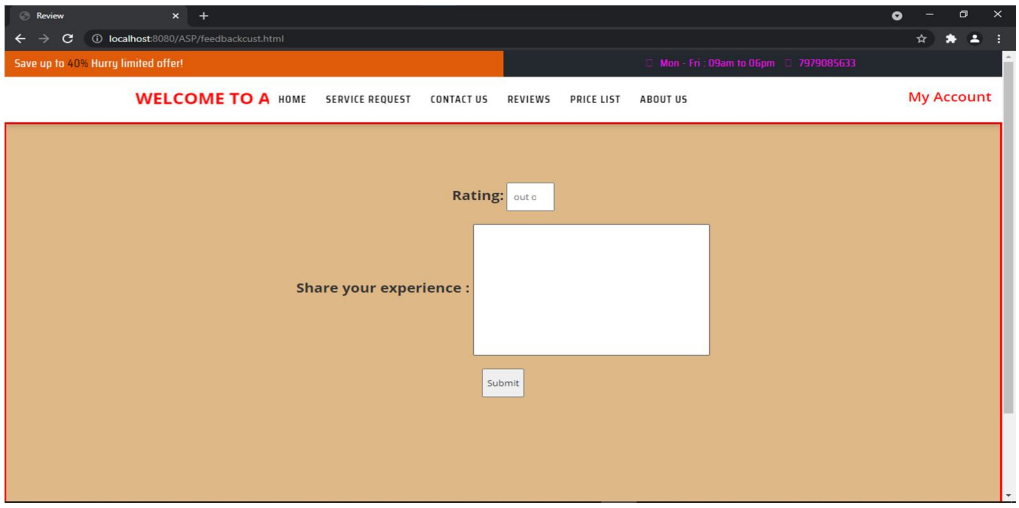


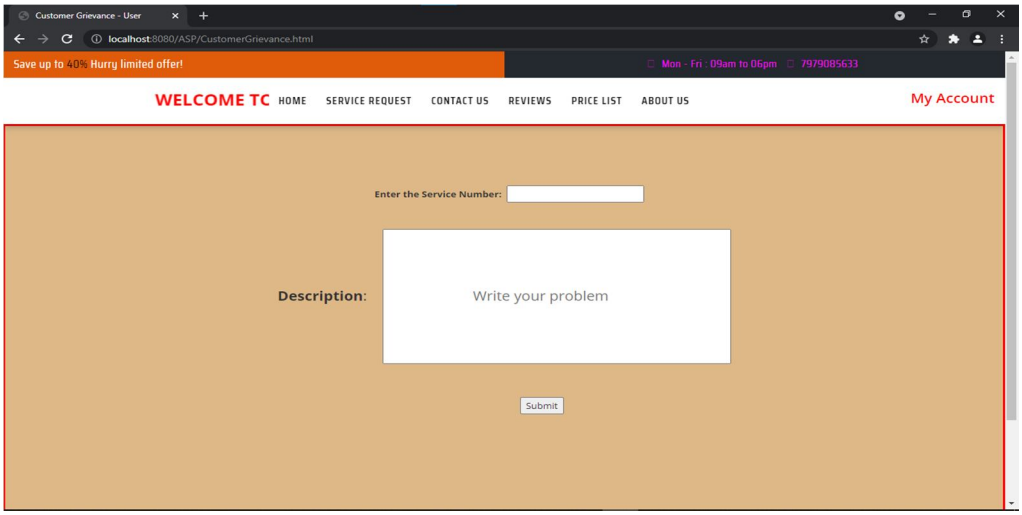


Service ID	Vehicle	Service Name	Service Price	Description
1	car	General Service	1500	Includes filling of engine oil, brake oil
2	car	Deep Service	2000	Includes general services and checking of 20 points
3	car	Service Pack 1	2500	General Service + Deep Service + Polishing
4	car	Service Pack 2	3500	Denting Repair + Painting
5	car	Complete Service	6000	All services except Painting
6	bike	General Service	1000	Includes filling of engine oil and brake oil
7	bike	Deep Service	1500	General Service + Wheel Alignment
8	bike	Special Pack	2200	General + Deep Service + Polishing

©IJRASET: All Rights are Reserved







These snapshots give a glimpse of the service portal. The modest approach of the portal to provide a simple way to connect with customer and grow. For future enhancement of this portal, an application will be the best solution and the site will be more user-friendly and modern.

This is the basic structure of the portal with a basic level of CSS. It can be modified and changed differently for types of service providers; this is like a basic building block of the online service portal.

©IJRASET: All Rights are Reserved

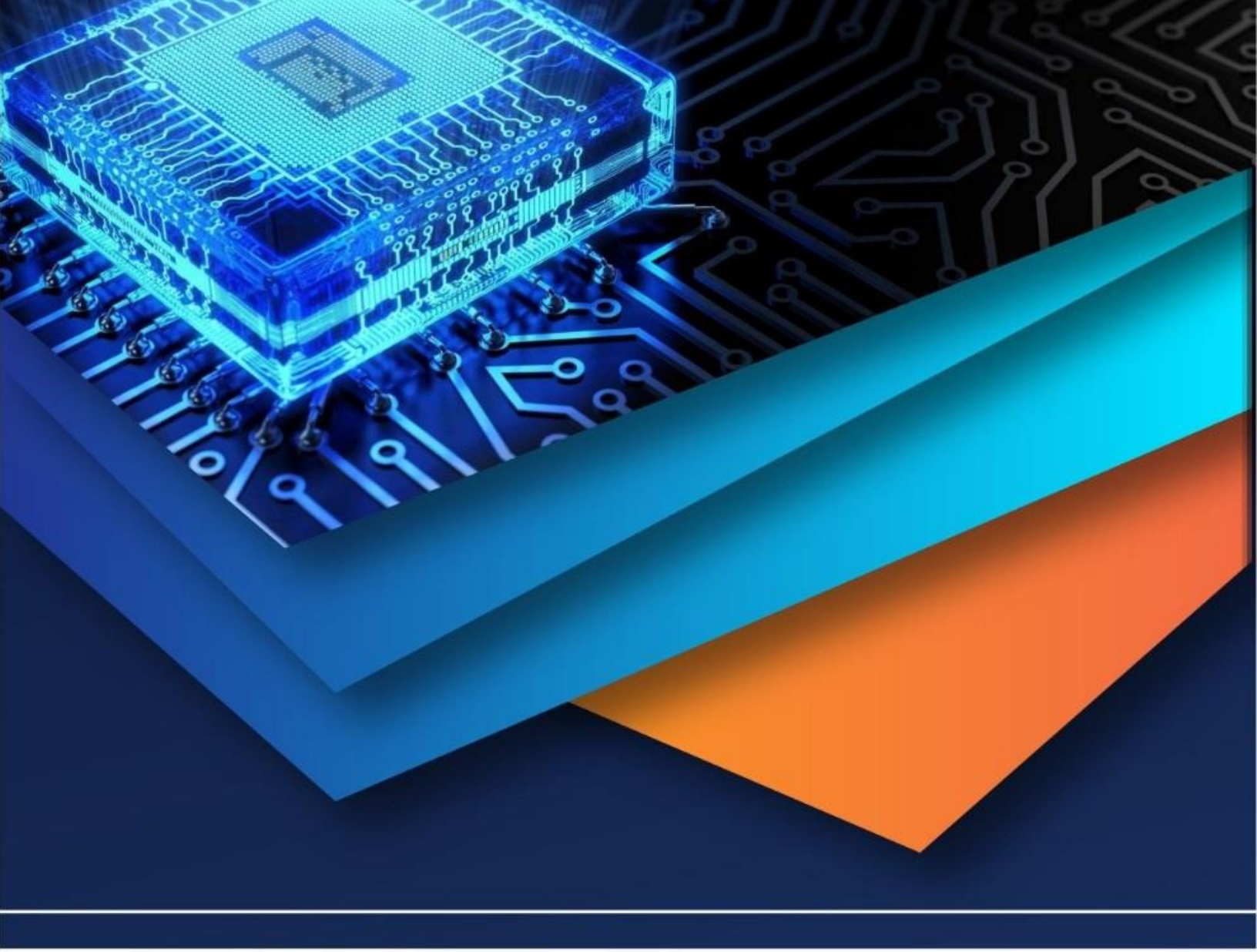
IV. CONCLUSION

This online service portal can be adapted by any service provider with some modifications. The modest approach is to provide a solution for service providers to connect with their customers. To grow and smartly manage the services. We have seen huge growth and falls in businesses during the pandemic, so this can be a solution for service providers. In this paper, we implemented this portal as Automobile Online Service Portal.

REFERENCES

[1] A. Shahlol, A. Alix and A. Lagman, "Web-Based Automobile Service Management System for MAS Motors LLC," 2018 IEEE 10th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management (HNICEM), 2018, pp. 1-6, DOI: 10.1109/HNICEM.2018.8666420.
[2] Susan H. Rodger, Robert Duvall, Owen Astrachan, Andrew D. Hilton, Java Programming and Software Engineering Fundamentals Specialization [MOOC], Coursera.
[3] Iuliana Cosmina, Java for Absolute Beginners, ISBN: #978-1-4842-3778-6, published in 2018

©IJRASET: All Rights are Reserved



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)