Online Rent A Car System

Ujala Rehan, Wahab Raza, Afshan Mehmood

Abstract — Through this paper, we define our aim, which is to plan and make information about the executive's framework for a vehicle rental organization. This empowers clients to can lease a vehicle by paying the cash for a predetermined timeframe. This framework expands client connection and disentangles vehicle leasing in an effective manner. This product vehicle Rental Framework has a very easy to understand interface. Along these lines, the clients will feel simple to chip away at it. By utilizing this framework, the client can deal with their Appointments, alter and update their profile highlights, and so forth; however, the data can be added to the framework. Or on the other hand, existing data can be altered or erased by the Manager as it were. The exchange reports of the vehicle rental framework can be recovered by the administrator when it's required. Accordingly, there is no postponement in the accessibility of any vehicle data. The clients can likewise utilize the framework to enlist their vehicle for winning and furthermore register themselves for the commander. The client ought to make another record before signing in, or he/she can sign into the framework with his/her made record.

Keywords—Software-Defined Network, Implementation, infrastructure layer, Control layer, Application Layer, OSI Model, NOX Controller

I. INTRODUCTION

The current innovative progression has turned out to be famous for its speed, and it has likewise influenced the vehicle rental industry. The challenge to procure more clients is more grounded, and consequently, any administration offering to achieve the dominant part gives a specialist co-op an upper hand. By and by, clients are searching for progressively adaptable and advantageous strategies for directing vehicle rental. Despite the fact that the organizations in the vehicle rental business are working, as in the past, by leasing vehicles to clients, the workplace is changing to more IT and web-based arrangements. On the off chance that beforehand the vehicle rental administrations were dealt with in a customary way, for example, all inquiries and administrations were directed by telephone and messages; presently, the vehicle rental industry is progressively searching for new methodologies. This investigation centers around sketching out another administration model for directing vehicle rental business dependent on the expanded online access usage and the thought of Area Based Administrations. The objective gatherings for this model are a wide client bunch, essentially speaking to any clients who have a legitimate driver's permit and utilize the web innovation [1-2]

Ujala Rehan is with Alpha Software Solution, Karachi, Pakistan. (Email: urehan@hotmail.com)
Wahab Raza is with MIIT University, Kaula lumpur, Malaysia.
(Email: engr.wahab@gamil.com)
Afshan Mehmood is with Alpha Software Solution, Karachi, Pakistan. (Email: afshanmehmood@hotmail.com)
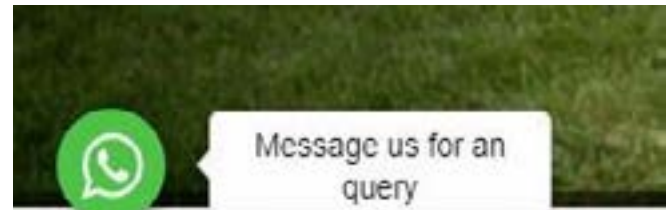
Figure 1 Showing live chat feature in the web application

Figure 2 Front view of the website

This project is designed to be used by ILMA Online Rent A Car application to provide available cars to customers. It is an online web-based application to provide cars at the lowest rates but of high-quality service. It's a user-friendly application. The admin can be used for a fully responsive website panel. It has to manage all details for this website panel [3-5].

If a user aims to book a car, after opening the website, he has to register himself to check and avail of the services. By filling this sign up the form, he will be able to register himself.

Once after signing in, the app generates the profile of the user, and the user can see the available cars to book and can also read their details and reviews of other customers.

II. METHODOLOGY

This project is completed in different phases. In earlier stages, the Requirement analysis and design phase are done by implementing the agile model. The reason for using an agile model can be implemented for multiple tasks that have to be performed at each step of the development phase and any size of the project.

All the documentation can be done at every stage of the

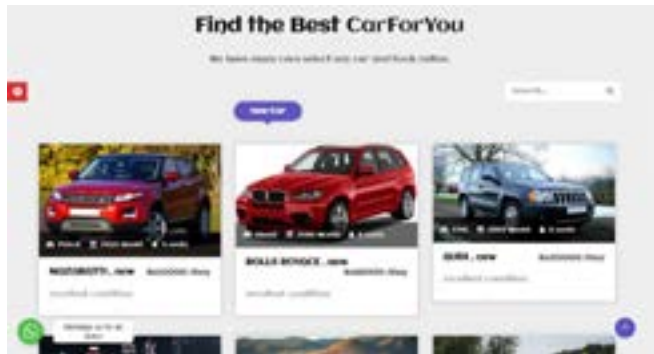Figure 3 Showing the registration form of the user.

Figure 5 Shows the list and details of available cars

Figure 4 Showing users personal profile created after registrations

project flow. At each stage, testing and debugging can be done. The main methodology, which was focused on the implementation of the project, is the Software Development Life Cycle (SDLC).

III. RESULTS AND DISCUSSION

After the completion of the project and the implementation phase, the application is now ready for the test by users. For evaluating user acceptance testing on the web-based and live chat system, the study was tested to 20 respondents.

Figure 6 Showing the phases of SDLC.

It has five columns which user will fill against each statement according to their own experience.

In the form, the numbers are for; 1: Strongly agree, 2: Agree, 3: Satisfied, 4: Disagree, 5: Strongly Disagree.

M stands for the mean.

In order to evaluate the effectiveness of the system, this study has successfully done for each type of criteria. Table 1 summarizes results for identified criteria. Mean for every question, and the total mean for each category was calculated, respectively.

Hence, the here overall system shows that respondents are satisfied with our system, and they like its unique feature of live chat [6-7].

In our app, we have also provided the facility to users to share their views after using the application. So every time after using the ride, you can share your experience so others can also know about the quality and services. By knowing the good experiences of previous clients, new clients will feel free and more secure to use our application.
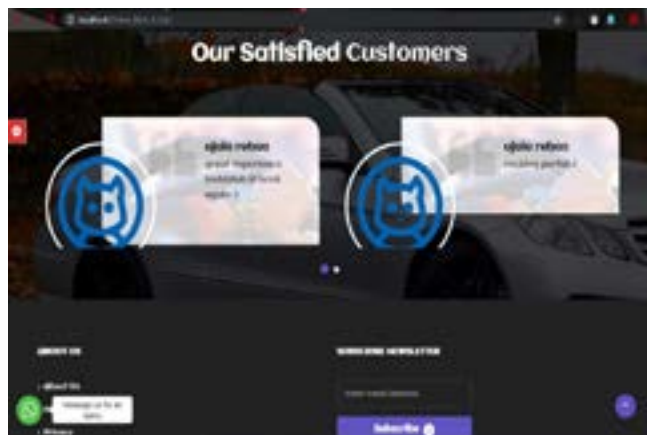
IV. CONCLUSION

Through this paper, we have presented some insight on using technology to construct and integrating a web-based system with an addition of a live feature to enhance services provided by the ILMA car rental system. For measuring the effectiveness of the system, user acceptance testing was done for evaluating the performance of the system by using the questionnaire method. Then based on results and overall analysis system was measured to be acceptance by users.

Table 1 Analysis and mean on the effectiveness of the system

No.	Criteria	1	2	3	4	5	M
	User Interface Design						
1	Characteristics of the system are easy to read.	8	7	4	1		
2	The terms used in the system are consistent.	7	7	5	1		
3	The interface of the system is pleasurable.	16	4				
4	I like the interface of the system.	15	5				
5	The live chat feature provides security.	20					
6	Performing tasks in this system are clear.	13	5	2			
	Total Mean:						
	Usefulness, ease of use and usability						
7	Using the system helps me to rent faster.	13	4	3			
8	Using the system saves me time.	12	3	3	2		
9	The system is easy to use.	12	4	2	2		
10	I am satisfied with using this system.	14	5	1			
11	I am a comfortable using system.	12	5	3			
12	It's easy to find any information needed in the system.	15	2	2	1		
13	The system has all the functions and capabilities I want.	10	5	3	2		
14	I found various functions in the system were working well.	10	4	4	2		
	Total Mean:						
	Live chat feature						
15	The live chat feature used in the system is appropriate and relevant.	16	4				
16	I think the Live chat feature is helpful to users.	18	2				
17	Overall, I am satisfied with the system.	12	3	3	2		
	Total Mean:						

V. REFERENCES

[1] Fast-Path Research institute. 2017 online short-term rental market report[R], 2017 Montrose, M. I. (1996). Printed circuit board design techniques for EMC compliance (Vol. 1, p. 996). Piscataway, NJ: IEEE press.

[2] The National Center for Information Research has shared economic work with China Internet Association. China Share economic Development Report 2016. [R], 2016.

[3] Iresearch Consulting. 2016 China online holiday leasing market research Report.[R]2016.

[4] Wang Bin, Lin Danming. The evolution and innovation of e-Business management model [j]. Journal of Shantou University, 2005.Vol.21. No. 4.

[5] Arain-Offer. Internet business model and strategy,Beijing, Tsinghua University Publishment,2002.

[6] Ling Cao, Zhang Zan. A study on the development path of "sharing economy" in China _ take online short rent as an example, [J]. Modern management Science-10th issue of the 2014 P36-38.

[7] Pan yuemin, Zhang yuanyuan. Shared economy: Online short-term leasing business model [j]. Technology and business. No. 2014.03. P74-75.

[8] Yua Le. Review of foreign business model theory [j]. Foreign economics and Management, 2010 (10).