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Online Request Management System for Vechicle Service and Test Drive

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Abstract
The people of all countries have a wish to stay in a comfortable stage with not boring work. The connecting one Internet being the backbone of all of the technologies, which gives a totally strong infrastructure for any net primarily based on the software made up with program. The Website and Mobile Application for Vehicle Service Center is a breakthrough within the subject of provider centers. The motive of this assignment is to automate the general procedure for the proprietor of the garage, mechanic and the consumer through locating out the different factors accountable for affecting servicing and preservation procedure of cars for all so as accelerate time required for it. Hence, we proposed the assignment paper on `ONLINE REQUEST MANAGEMENT SYSTEM FOR VECHICLE SERVICE AND TEST DRIVE '. Any Vehicle consumer can employ such app to speak with the specific provider center for which the provider is provided. This device give communication with the consumer of this provider through offering them well correct timing notification with right information like whilst the auto might can be prepared or improvement of of servicing. To make android app which is created by java used as a front giving up language and Fire Base is used for the database. Database is the principal recognition on this assignment due to the fact maximum of the data could be saved in database itself. For that to have a look at various sorts of normalization is necessary. Normalization is a database layout approach which organizes tables in a way that reduces redundancy and dependency of data. Now for Website the software program visible studio might be used and the front-give up languages we can be the usage of are html, CSS, JavaScript and Django as a back-give up. We are constructing this as consumer friendliness, in formativeness and time saving.

Keywords: *Request Management, Test drive Request, Vehicle service Booking.*

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I. INTRODUCTION

In the recent advancement of technology, the use of mobile applications and website have increased in this age to reduce the physical work of people. The Indian auto industry became the 4th largest in the world with sales increasing 9.5 per cent year-on-year to 4.02 million units (excluding two wheelers) in 2017. It was the 7th largest manufacturer of commercial vehicles in 2018. So it is important to make the services easy for their customer. This paper is based on to manage the work regarding servicing of automobiles and to monitor the work done by their staff. Here we provide the project on 'Design Website and Mobile Application for Vehicle Service Centre' which can be used in automobile centers to communicate with the particular service centre. It provides the services to their customers and especially to the owner of the garage to monitor overall flow of the service center. This system communicates with the user of this service by providing them timely notification with proper details like when the car will be ready or progress of servicing. To make android app java used as a front-end language and FireBase is used for the database. Database is the main focus in this project because most of the information would be stored in database itself. For that study of different forms of normalization is necessary. Normalization is a database design technique which organizes tables in a manner that reduces redundancy and dependency of data. Now for Website the software visual studio will be used and the front-end languages we will be using are html, CSS, javascript and Django as a back-end. We are building this as user friendliness, in formativeness and time saving. Notification services to serve user better at the communication and acknowledgement end in order to provide timely report. Garage information and its different aspect like expected time and money requirement for different services available

II. LITERATURE SURVEY

VEHICLE SERVICE SYSTEM – International Research Journal of Engineering and Technology (IRJET)
This Project chiefly manages Web Development System which is on vehicle Service System in a changed manner. It is a site that is viable on PC, mobile or portable. This framework permits the client to communicate with various assistance places. This System gives a stage to vehicles like cars or bikes for administrations like spot booking, auto computation of time and charging sum, FAQs, and some more. The current help frameworks are having a few downsides for giving clients essential accessibility of spaces, which are accessible for them or not. Clients burn through their time visiting distinctive assistance communities for an open space for overhauling and have issues in charging sum. This System will dispose of the multitude of issues looked at by the clients and tackle them. The Web will in general be the foundation of the multitude of advances. As we are moving towards the innovation driving age, the force of innovation is offering wings to individuals not exclusively to get to innovation yet additionally to satisfy every one of the necessities at their finger point. The number of vehicles in India will increment presently, it will expand the number of vehicles at the technician shop to get overhauled. The present circumstance will shape a chain at the repairman shop. The issue of long lines and holding up can be exceptionally huge later on. The Vehicle Service System for Automobile Services is a reformist advance in the field of administration focuses and carports. Any vehicle client can utilize this site to find and speak with the help communities or carports around there, book the accessible opening with the determination of administrations required. After the booking, the client will definitely know the time that will be taken for adjusting and the charging sum. Likewise, clients will have FAQs to help them with any inquiries.
AUTOMOBILE SERVICE CENTER MANAGEMENT SYSTEM – International Journal of Scientific and Research Publications, Volume 4, Issue 3 Here we provide a mobile application for 'Automobile Service Center Management System'. This application is an android app which can be run on any android compatible tablets and mobile phones. The app will enable any car user to search and communicate with any car service center in the vicinity. The user can find the service center , get it's location and check and select any of the services provided by the respective service center. The user can send request for pick and drop , appointment for servicing , test drive as well as accessories purchase to the dealer. The dealer processes these requests and gives a response back to the user through push messages. This app also enables the user to set alarms for next servicing date , payment of insurance installment , etc. The app is provided with an extra feature of EMI calculator too. Thus we are developing an application which goes hand in hand with the new age technology and characterizes – user friendliness, informativeness and time saving.Internet tends to be the backbone of all the technologies. The Automobile Service Center Management System (ASCM) is a progressive step in the field of service centers. Any car user can make use of such app to locate and communicate with the service centers in the vicinity. The proposed system can be used by any automobile user.

DESIGN AND DEVELOPMENT OF A WEB BASED VEHICLE MANAGEMENT SYSTEM (VMS) –The International Journal of Multi-Disciplinary Research, This project was aimed at designing and developing a web-based Vehicle Management system (VMS) for Africonnect. The system is to be used internally as an ERP system for the organization to manage vehicles in terms of distribution of fleet for operations to reach their customers. The VMS is designed to enable users from departments to request for a vehicle through the system. In addition to allocation of vehicles, the system also optimizes the use of company or corporate transport resources such as misuse of fuel and also reduction of unplanned use. Tremendous works has been done in form of vehicle management as well as installing of tracking systems to vehicles, but internal distribution has been left out to help out the organization in planning schedules. Through the use of the system, vehicles are only allocated when need arise and requested. The requests have to be approved by the administrator for the vehicle to be given out. The vehicle is only given out if it is not on maintenance, break down and is readily available. The system administrator is able to perform the Create, Read, Update, Delete and Edit (CRUDE) Operation on Users, Departments, and Vehicles and approve/decline requests from user depending on the status of the vehicle or nature of the task. In addition to CRUDE Operations, the administrator is also responsible for routine maintenance checks of vehicles such as Fitness, Road and Insurance Taxes through the system. The system has the capability of reminding the administrator on the mentioned taxes via the reminders tab when any of them is due for payment to avoid unnecessary charges. The system is able to calculate the next maintenance schedule for a vehicle using the current mileage plus the default service mileage. By default, the vehicle is supposed to move about 5000 Kilometers before taken for engine service. The administrator then is able to update vehicle record once it is returned by the user. After the maintenance, the administrator is responsible to update the next service mileage threshold value.

III. EXISTING METHOD

The purpose of this project is to provide car or any other automobile servicing system more effectively than the existing system. There are some disadvantages of the existing service center management systems. These disadvantages are overcame by the automobile service center management system. And it can be made handily available to every person. Previously people could not get help or locate the service centers conveniently in case of their car break-down or any other emergencies. Thus ASCM is proposed to assist people

and fulfill their requirements easily

IV. PROPOSED SYSTEM

Idea behind the proposed system is to provide as much as service to the owner of the service centre as possible. Here we are trying to manage 3 different entity.1. Owner of the service centre. 2. Mechanic who is there to repair specific automobile. 3. User or vehicle owner which is taking the service. This system will provide services to the owner to monitor overall flow of the service centre like transaction of spare part, money etc. here the information about the current progress on the vehicle and the status of the garage will be updated by the mechanic itself, which then will be differentiable whether which data is meant to which entity for displaying purposes. At first user has to make account by providing phone number and creating a password. User's personal data will be encrypted and secured. Then after validation user can opt from the given services to which the user want. Now all of the queries of the user will be handled by the system we are going to provide. Since user will be provided with an interactive interface by which user can view current progress. The same goes for the owner of the garage, can too view everything that is being carried out from anywhere owner wishes to.

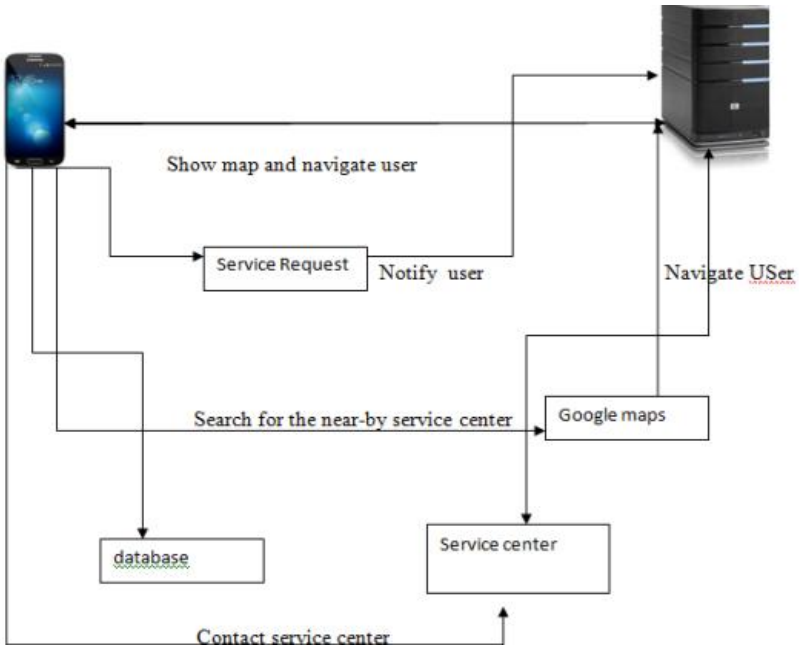

Fig 4.1 ARchitecture Diagram

V. KEY RESULTS

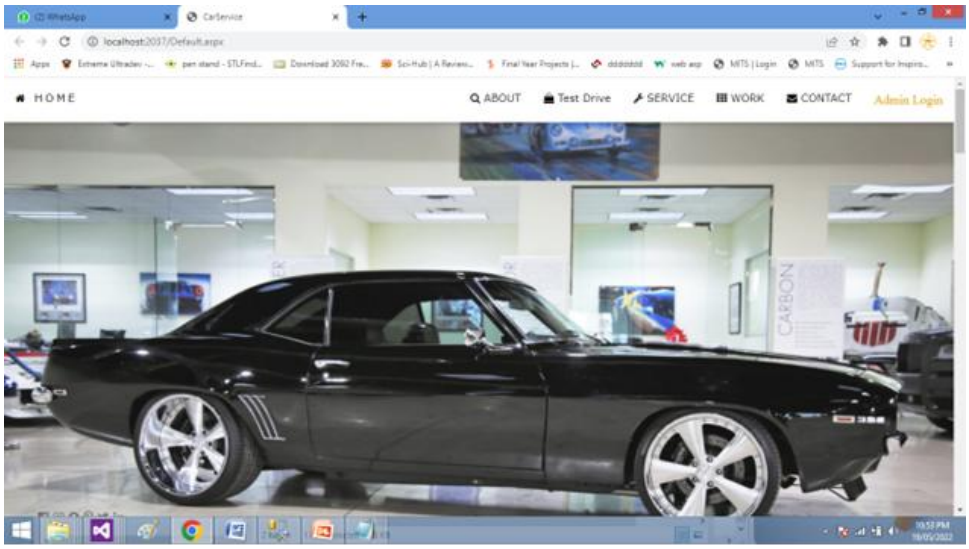

Fig 5.1 Homepage

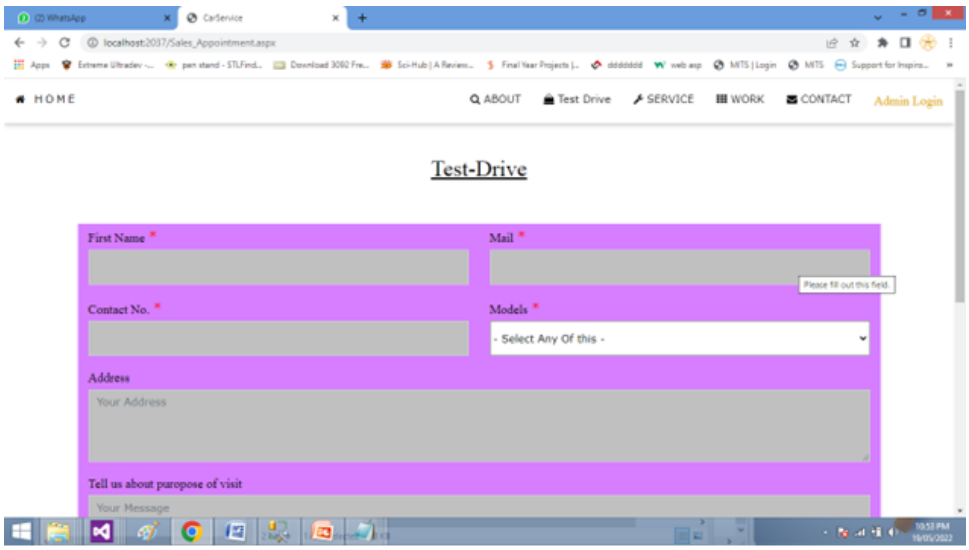

Fig 5.2 Page for Test-Drive

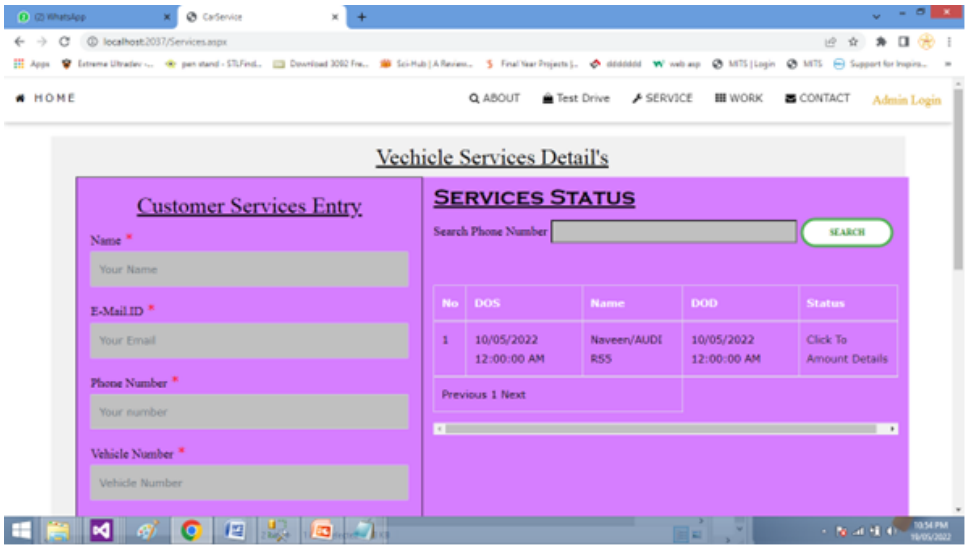

Fig 5.3 Page for Vehicle service

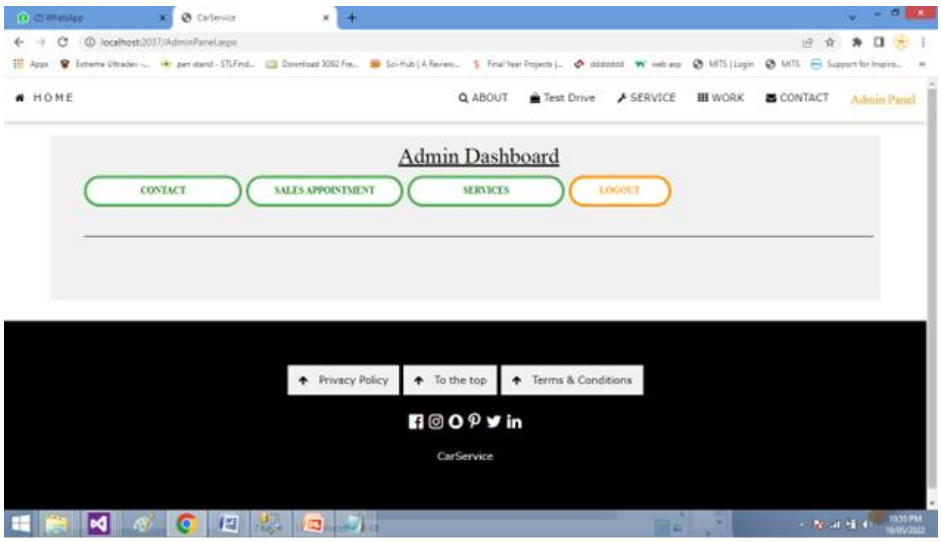

Fig 5.4 Admin Dashboard

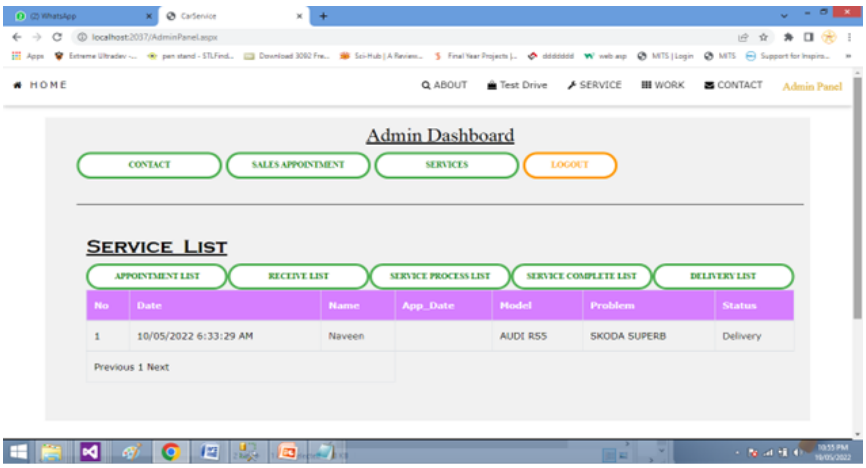

Fig 5.5 Admin Dashboard for Service vehicle Request

VI. FUTURE ENHANCEMENTS

The main goal of this project is increase productivity of the garage by supplying a system that can act as a mediator between owner of garage and mechanic, and also between mechanic and the user. Now this model can be further expanded by providing post service notification like next servicing date, oil or tire replacement and other aspects of a vehicle

VII. CONCLUSION

To overcome all the drawbacks of the existing system of Automobile Servicing, this System is required where the complexities in the process of management for automobile services are reduced for the convenience of automobile owners. Through this system timely updates of services of automobiles can be sent to their owners. Automobile servicing becomes easy through this system. So, the system aims at improving the existing system and providing an efficient way for managing automobile servicing. Thus, it is time saving as well as cost efficient application. So, we can conclude that it can be used to reduce human efforts and luxuriate human lives, hand in hand, with the modern technology

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