

Car & Motor Vehicles Sales and Maintenance

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Abstract - The car & motor sales system application will help the users to enter the details of the car with great ease. You will be able to search for the car of your choice for sale in the town. You can use this application remotely anywhere from the world and enter the details of the car that one need to sell. The price may be depended on the number of hours that you model of the car. Most of the people in the world will have a craze about the cars that are being bought in the market. But some people will be having the craze of enjoying car rides in the new cars that are introduced into the market. Car & motor vehicles need maintenance from time to time Like humans are required to maintain hygiene, similarly Car & motor vehicles also need to be kept clean. Car & motor vehicles have to run on dirty roads and in a polluted environment. They run on uneven roads with potholes and other obstructions, and are therefore subjected to loads which damage them. Therefore, there is a need for regular maintenance of Car & motor vehicles.

Indexed Terms— The car & motor sales, Car & motor maintenance

I. INTRODUCTION

More than two-third of automotive customers indicate that Service Convenience is a determining in selecting a brand or purchasing from a Specific dealership. Consequently, Customer Service and service management is of vital relevance to ensure ongoing Customer loyalty and retention and ultimately, dealer Profitability. Dealer Business Management enables efficient Service order Processing and billing designed for any given number of orders per day it includes Service requests and Scheduling, Optimization of technicians, tools, and parts as well as their deployment and scheduling User friendly interfaces provides ease of use and the integration technology ensure a seamless, including job and package catalog, Vehicle history files

Warranty Systems, etc. Service monitoring and analysis increases the Visibility in Overall fixed Operations and helps increases service Capacity utilization efficiency and decreased operating cost. Recreation Vehicle service technician inspect, test, service, and replace every system installed in a recreation Vehicle with the exception of the dry. Both intervals are equally important for properly marinating your Vehicle Remember all Toyota dealerships offer a broad range of Parts and Service. According to database available online on Driver and Vehicle Licensing Agency, the Driving Standards Agency and the Vehicle and Operator Service Agency Provide Services for 42 million drivers.

1.1 Motivation

Automobiles are highly complex machines and ones which need to be maintained to keep them running smoothly and efficiently. Regular maintenance should help to keep you on the road and often you will find that it is maintenance that you can easily do yourself which can be rewarding and help you to make big savings. As I'm seeing this problem day to day life. Having my own personal car I realized the maintenance of it, is much more necessary.

Objective:

The objective of the Vehicle Services is to provide better information for the users of this system for better results for their maintenance in the product details that is sales, purchases and stock.

Maintain vehicles to promote the safety and comfort of passengers, operators, and protect the public.

Goal:

The cost of regular maintenance is very small when it is compared to the cost of a major breakdown at which time there is no production. The main purpose of regular maintenance is to ensure that all

equipment required for production is operating at 100% efficiency at all times.

It increases safety on the road. Anything can happen on deserted roads and it is necessary you take proper preventive measures to avoid such incidents. Regular maintenance checks include inspection of your car for any underlying problems like a broken hose, loose belts or faulty battery.

Scope:

Properly maintaining your vehicle will not only ensure its safety and dependability, but may also increase fuel efficiency. According to the Car Care Council, performing simple and inexpensive maintenance may save as much as \$1,200 a year in gasoline cost.

The main scope of developing this project Car maintenance System project is to provide all the information related car servicing. Car Service Center Management System Project is to providing Repair car.

Features:

ADMIN:

- View/Edit/Delete Vehicle Details
- View/Edit/Delete sale Details
- Sale and Resale value details
- Sales in thousand per model detail

USER MODULE

- View Car Details for specific model
- User can access the data by providing access key
- User can also sell his 2nd hand vehicle so that company apply maintenance to it and then resale to needy customers.

MODULES OF CAR AND VEHICLE SELLS AND MAINTENCE SYSTEM:

- Car Management Module: Used for managing the Car details.
- Order Module: Used for managing the details of Order
- Insurance Module: Used for managing the details of Insurance
- Booking Management Module: Used for managing the information and c the Booking.
- Customer Module: Used for managing the Customer details

- Payment Module: Used for managing the Payment informations
- Login Module: Used for managing the login details
- Users Module: Used for managing the users of the system.

INPUT DATA AND VALIDATION OF THE PROJECT:

- All the fields such as Car, Customer, Order are validated and does not take invalid values.
- Each form for Car, Booking, Insurance cannot accept blank value fields
- Avoiding errors in data.
- Controlling amount of input.
- Integration of all the modules/forms in the system.
- Preparation of the test cases.
- Preparation of the possible test data with all the validation checks.
- Actual testing done manually.
- Recording of all the reproduced errors.
- Modifications done for the errors found during testing.
- Prepared the test result scripts after rectification of the errors.
- Functionality of the entire module/forms.
- Validations for user input.
- Checking of the Coding standards to be maintained during coding.
- Testing the module with all the possible test data.
- Testing of the functionality involving all type of calculations etc.

IDENTIFICATION OF NEED:

The old manual system was suffering from a series of drawbacks. Since whole of the system was to be maintained with hands the process of keeping, maintaining and retrieving the information was very tedious and lengthy. The records were never used to be in a systematic order. there used to be lots of difficulties in associating any particular transaction with a particular context. If any information was to be found it was required to go through the different registers, documents there would never exist anything like report generation. There would always be unnecessary consumption of time while entering records and retrieving records. One more problem was that it was very difficult to find errors while

entering the records. Once the records were entered it was very difficult to update these records.

The reason behind it is that there is lot of information to be maintained and have to be kept in mind while running the business for this reason we have provided features Present system is partially automated (computerized), actually existing system is quite laborious as one has to enter same information at three different places.

SYSTEM DESIGN OF CAR AND VEHICLE SELLS AND MAINTENANCE SYSTEM:

In this phase, a logical system is built which fulfils the given requirements. Design phase of software development deals with transforming the clients 's requirements into a logically working system. Normally, design is performed in the following in the following two steps:

1. Primary Design Phase:

In this phase, the system is designed at block level. The blocks are created on the basis of analysis done in the problem identification phase. Different blocks are created for different functions emphasis is put on minimising the information flow between blocks. Thus, all activities which require more interaction are kept in one block.

2. Secondary Design Phase:

In the secondary phase the detailed design of every block is performed.

IMPLEMENTATION METHODOLOGY:

Model View Controller or MVC as it is popularly called, is a software design pattern for developing web applications. A Model View Controller pattern is made up of the following three parts:

Model - The lowest level of the pattern which is responsible for maintaining data.

View - This is responsible for displaying all or a portion of the data to the user.

Controller Software Code that controls the interactions between the Model and View.

MVC is popular as it isolates the application logic from the user interface layer and supports separation of concerns. Here the Controller receives all requests for the application and then works with the Model to

prepare any data needed by the View. The View then uses the data prepared by the Controller to generate a final presentable response. The MVC abstraction can be graphically represented as follows.

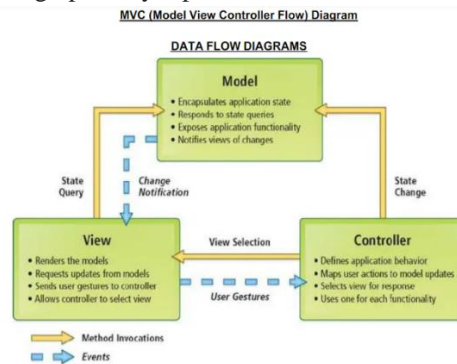


Fig 1 : Model view controller flow diagram

PERT CHART (Program Evaluation Review Technique)

PERT chart is organized for events, activities or tasks. It is a scheduling device that shows graphically the order of the tasks to be performed. It enables the calculation of the critical path. The time and cost associated along a path is calculated and the path requires the greatest amount of elapsed time in critical path.

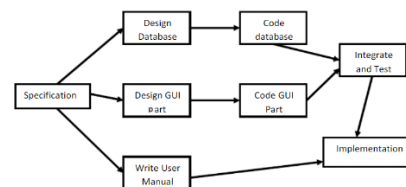


Fig 2: PERT Chart

FUTURE SCOPE OF THE PROJECT:

In a nutshell, it can be summarized that the future scope of the project circles around maintaining information regarding:

- We can add printer in future.
- We can give more advance software for Car Shop Management System including more facilities
- We will host the platform on online servers to make it accessible worldwide
- Integrate multiple load balancers to distribute the loads of the system
- Create the master and slave database structure to reduce the overload of the database queries
- Implement the backup mechanism for taking backup of codebase and databas on regular basis on different servers.

We have left all the options open so that if there is any other future requirement in the system by the user for the enhancement of the system then it is possible to implement them. In the last we would

like to thanks all the persons involved in the development of the system directly or indirectly. We hope that the project will serve its purpose for which it is develop there by underlining success of process.

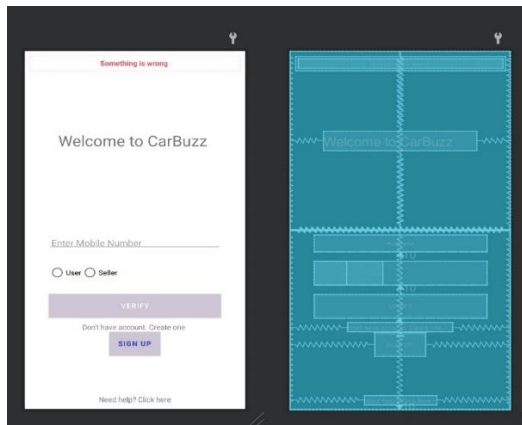


Fig 3: Project snippet

CONCLUSION

This article has analyzed the automobile sale management information system present situation, in the full analysis automobile sale management foundation, through the full elaboration to the system structure, the scale, the function and the software, the hardware disposition and so on carried on the design and the development. Automobile sales management information system is designed and realized. Which can collect, store, transfer, process, display and analyze all kinds of information involved in automobile sales to realize data sharing, personnel collaboration and process optimization of automobile sales, and improve the overall benefit of automobile industry. Finally, a data encryption algorithm is designed to ensure the data security of the system.

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