**Project 18: Waverly Cars Showroom Online System**

**Project Brief:**

## Features Required for Waverly Car Showroom Management System:

* Provide the searching facilities based on various factors. Such as Car, Loan, booking, Customer
* The transactions are executed in off-line mode, hence on-line data for Car, Payment capture and modification is not possible.
* It should track all the information of Payment, Insurance, booking etc.
* Manage the information of Payment
* Show the information and description of the Car, Loan
* All the fields such as Car, Loan, Customer are validated and does not take invalid values
* It should generate the report on Car, Payment, Insurance
* Provide filter reports on Loan, booking, Customer
* can easily export PDF for the Car, Insurance, booking
* Application should also provide excel export for Payment, Loan, Customer
* It should also export the report into csv format for Car, Payment, Customer
* To increase efficiency of managing the Car, Payment
* It should deal with monitoring the information and transactions of booking.
* Manage the information of Car
* Editing, adding and updating of records should be improved which results in proper resource management of Car data. Manage the information of booking.

**Business Problem Specifications:**

The Waverly’s Car Showroom needs to be developed to override the problems prevailing in the practicing manual system. This software is supported to eliminate and in some cases reduce the hardships faced by this existing system. Moreover this system is designed for the particular need of the company to carry out operations in a smooth and effective manner.

The application should reduce as much as possible to avoid errors while entering the data. It should also provide error message while entering invalid data. No formal knowledge should be needed for the user to use this system. Thus by this all it proves it should be user-friendly. Waverly Car Showroom Management System, as described above, should lead to error free, secure, reliable and fast management system. It should assist the user to concentrate on their other activities rather to concentrate on the record keeping. Thus it should help organization in better utilization of resources.

Every organization, whether big or small, has challenges to overcome and managing the information of Customer, Car, Insurance, Booking, Loan. Every Waverly Car Showroom Management System has different Car needs, therefore there is a need to design exclusive employee management systems that are adapted to the managerial requirements. This should be designed to assist in strategic planning, and should help ensure that that the organization is equipped with the right level of information and details for future goals. Also, for those busy executive who are always on the go, the proposed system should come with remote access features, which will allow the client to manage the workforce anytime, at all times. These systems will ultimately allow the users to better manage resources.

**Objective of Project**

The main objective of the project is to manage the details of Car, Customer, Payment, Insurance, and Loan. It should manage all the information about Car, Booking, and Loan. The project should totally built at administrative and user ends and only the administrator is guaranteed the complete access. The purpose of the project is to build an application program to reduce the manual work for managing the Car, Customer, Booking, and Payment. It should track all the details about the Payment, Insurance, and Loan.

**Reports Requirements:**

It should generates the report on Car. Customer, Booking

**System Modules**

**Admin Modules**

Provide filter reports on Payment, Insurance, and Loan

Export PDF for the Car, Booking, Insurance

Application should also provide excel export for Customer, Payment, Loan

System should also export the report into csv format for Car, Customer, Loan

Car Management Module: Use for managing the Car details.

Loan Module: Use for managing the details of Loan

Booking Module: Use for managing the details of Booking

Customer Management Module: Use for managing the information and details of the Customer.

Payment Module: Use for managing the Payment details

Insurance Module: Use for managing the Insurance information

Login Module: Use for managing the login details

Users Module: Use for managing the users of the system

**User Modules:**

Developers need to research and discuss with the client to finalise the modules and requirements.

**Input Data and Validation Requirements**

- All the fields such as Car, Payment, Loan should validated and should not take invalid values

* + Each form for Car, Customer, Booking should not 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.
  + Black-box/White-box testing.

# Recording of all the reproduced errors.

* + Modifications should be done for the errors found during testing.
  + Prepare the test result scripts after rectification of the errors
  + Functionality of the entire modules/forms.

# Validations for user input.

* + Checking of the Coding standards to be maintained during coding.
  + Testing the modules with all the possible test data.
  + Testing of the functionality involving all type of calculations.
  + Commenting standard in the source files.
* Easy & fast retrieval of information.
* Well-designed reports.
* Decrease the load of the person involve in existing manual system.
* Access of any information individually.
* Work become very speedy.
* Easy to update information

**The proposed system should have the following requirements:**

### System need stored information about new entry of Car.

* + System needs to help the internal staff to keep information of Customer and find them as per various queries
  + System need to maintain quantity record.
  + System need to keep the record of Payment.
  + System need to update and delete the record.
  + System also needs a search area.
  + It also needs a security system to prevent data.

**UI Design**

User Interface Design is concerned with the dialogue between a user and the computer. It is concerned with everything from starting the system or logging into the system to the eventually presentation of desired inputs and outputs. The overall flow of screens and messages is called a dialogue.

**UI Design Requirements**

1. The system user should always be aware of what to do next.
2. The screen should be formatted so that various types of information, instructions and messages always appear in the same general display area.
3. Message, instructions or information should be displayed long enough to allow the system user to read them.
4. Use display attributes sparingly.
5. Default values for fields and answers to be entered by the user should be specified.
6. A user should not be allowed to proceed without correcting an error.
7. The system user should never get an operating system message or fatal error.

The aim of proposed system is to develop a system of improved facilities. The proposed system can overcome all the limitations of the existing system. The system provides proper security and reduces the manual work.

* + Security of data.
  + Ensure data accuracy's
  + Proper control of the higher officials.
  + Minimize manual data entry.
  + Minimum time needed for the various processing.
* Greater efficiency.
* Better service.
  + User friendliness and interactive.
  + Minimum time required.

**Functional requirements:**

**Vehicle Information**

* Country of origin, location and showroom
* Defining Brands, (Makes)
* Defining Models, sub-models (Vehicle Codes)
* Defining Colors body and Interior
* Defining Options, standard and additional. Compatibility options
* Recording all specifications details like Chassis, engine, key, radio, etc.
* Controlling Data related to warranty in mileage or and in years and coverage
* Detailed Data related to purchases
* Categorizing Data related to sales
* Data related to PDI orders history
* Website Videos

**Purchasing**

* Ability to make a purchase request
* Ability to approve purchase request
* ability to make PO from Purchase request
* Ability to Add Vendor Invoice
* Ability to Add Import Cost & distribute it on vehicles
* Ability to Approve the final cost of vehicles
* Ability to add extra charges to selected vehicle
* Ability to Custom Release or Sell vehicle direct from free zone
* Ability to make vehicle inspection in all receiving processes

**Pricing**

* Ability to set sales prices for all vehicle models
* Ability to define custom sales price for specific vehicle with discount percentage range or max. amount
* Ability to define custom sales price per model/Interior colors
* Ability to define custom sales price per model/Accessories
* Ability to define custom sales price per model/colors
* Ability to add extra charges by vehicle code

**Vehicle Sales**

* Ability to make sale order to book the vehicle
* Ability to Reserve a vehicle type (without chassis) for customer if the vehicle not available yet
* Ability to make sale order for a specific vehicle (Available chassis)
* Ability to Add secondary customer with the primary one on sale order
* Ability to make sale order with bank option
* Ability to make quotation for individual or corporate or bank
* Ability to search for a vehicle by make , model , code , out color, in color , chassis , engine , year model or by vehicle status

**Accounting**

* Ability to make a payment receipt for multiple vehicles
* Ability to make a refund receipt for multiple vehicles
* Ability to make a customer invoice for multiple vehicles
* Ability to make a return invoice for multiple vehicles
* Ability to approve to debit a vehicle without full payment
* Ability to approve the final invoice
* Ability to make Refund Request & approve it.

Functional requirements are product features or functions that developers must implement to enable users to accomplish their tasks. So, it’s important to make them clear for the stakeholders. Generally, functional requirements describe system behavior under specific conditions. The developers of this system must enhance the performance and efficiency of the system by adding 15 to 20 more functional requirements. Students need to do their own research to find how they can improve the system and which FRs need to added. The group must need a prior approval from the stakeholders/project supervisor before finalizing these Functional Requirements. These enhanced FRs must be reflected separately in Final SRS Report after the approval.

**Hardware Requirement: Should be recommended by the developers.**

**Software Requirement: Should be recommended by the developers.**