# An Automobile dealer office automation

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**ABSTRACT:**Our project Automobile Rent Office Automation using the language VB.NET as Front end and SQLite as Backend. This job is very hard to process by hand and there may occur a few Errors.  But when it is computerized, it will be easier and it will take less time. This project is urbanized as application software, which is used to accumulate all information regarding Purchase order,Invoice,Item purchase,Customer purchase & dailycollected works and about the entries in the Spare Parts. System deals with the purchase and sales of the good and maintains the stock, contains various forms and reports with different function. It has the menus created for unlike forms and reports. When you click the menu, It will open the related forms about the customer, vendor, Items and Transaction. This is the perfect system for the rent office showroom to handle the data and help their customers to buy a product without any problem. It makes the process of buying a car in very simple way.
**KEYWORDS:**Automation;Computerized; Information; Collection

## I.  INTRODUCTION

This is software which can be used by a automobile center for keeping the records of items which is to be transacted for purchase and sell. It will help to keep a record of all the transactions and a password login is created for security.  Further we do not have to maintain everything manually. Through this system if any transaction occurs it is corresponding entries are done automatically because database management system gives facility of having relationship between the tables and we do not have to maintain different books for accounting.So far handles partially computerized records.  There are several disadvantages like manual operation involves a lot of paper work and procedures.Also repeated entries of data in various books of accounting, which guides data redundancy and data inconsistency. The papers may get damaged and there is a chance for theft.

Maintenance of registers therefore occupying the space in rooms.Increase in clerical work and hence the cost of labors will be increased. Difficulty in updating of records. Reduction in speed of work. External customers have to contact the service centers in person for the required service. In order to overcome the disadvantages, project needs computerization.

## II.  LITERATURE REVIEW

[1]  Jung, Jayakrishnan, and Park et al  proposed Design and Modeling of Real-time Shared Taxi Dispatch Algorithms : An optimization scheme is developed for the Realtime vehicle routing in fully flexible shared-taxi systems and a simulation study is conducted to investigate how such a shared-taxi system can improve passengers travel compared to conventional taxi services by utilizing vehicle resources can be more efficient. Real-time shared taxi operation with associated algorithm is studied with realistic scenario, to evaluate the systems performance and the efficiency of solving the vehicle routing problem.Three different algorithms for shared-taxis are introduced and compared.(a) a Nearest Vehicle Dispatch (NVD) algorithm that is most commonly used in real Applications.(b) an Insertion heuristic (IS) that handles real-time passenger requests in a fast and simple manner.(c) A Hybrid Simulated Annealing (HSA) that assigns passengers efficiency and dynamic to available vehicles.
[2]  Anurag Mandle, Akshay Jaiswal, Bhushan Dod, Roshan Lokhande et al  focused on Taxi Automation Using Real Time Adaptive Scheduling. In TAS (Taxi Automation System), online dispatch of available taxis to current customer bookings are done with the aid of a satellite-based taxi automation system; the system utilizes a Global Positioning System (GPS) to automatically locate taxis in real-time.In handling current taxi online bookings, the major focus of taxi automation systems have been primarily on reaching individual customers in the shortest time

possible to enhance customer satisfaction. Further solution has an automated adaptive scheduling subsystem and the shortest path algorithm which has the ability to match drivers and orders to change their status automatically. While selecting the taxi during the allotment of different microeconomic data that is considered the following. The remaining distance of the journey is already allocated to taxi. Distance from the destination to the source i.e. from where the new request was generated.

[3]  Michael Berman, Sue M. Lewis and Anthony Conto et al focused on Location-Aware Computing. Our System that can sense the current location of a user or device and change behaviour based on this location, such as GPS. Since, GPS device knows its current location, it can give directions to the GPS user for how to get a new location and it can update these directions continuously as the device moves. Practical concerns related to location-based services are accuracy of location's information, visualization, timeliness of the information, and transparency of location's information. Privacy concerns must be a part of the design for location-based services. Users must be aware of when they can be uniquely identified, who has to access their location data, and how long that data may persists.

## III. PROPOSED SYSTEM
The system consists of hardware and software components
A.        Hardware Components
Processor  :Core i3 and above 650 MHz
Cache               :256 KB
RAM       :2GB RAM
CD-ROM            :48 IDE
Hard disk drive      :500GB
Floppy Disk drive  :1.44 MB
Monitor   :15 Digital Color Monitor
Mouse               :Logitech
Key Board          : 107 Keys
B.        Software Components
Platform                  :Visual Studio 2010
Front End          : VB .NET
Back End            :MS-Access
C.        Module Description
        This is integrated software; It is having options to accomplish day to day activities of the car showroom. It can be used in any car show room across country so it is having wide receipt across the country and decided to develop the Project.

• Fleet Information: Fleet information contains, vehicle information that should be stored for further development of document record and it

can be stored in dB as editFleet moduleId,Reg No .

• Description,    VehicleModel,color,Type,Initial deposit.

• Customer Details:A customer information are entered details should given by the customer those who are all visit at office , and the various information can be noted.They are Customer    id,Name    LicenseNumber,Phone number,Address

In Customer id ,the  customer id can be same as the fleet information should provided by the employee. In Service,there is no discount for the vehicle which is coming for the company service.

D.    Dispatch Vehicle Contain The Following Menu
• Vehicle information
• Company Invoice
• Customer details
• Purchase Return
• Return Invoice
• Customer deposit
E.    Purchase Order
Billing table. The Purchase Order has,
• Order No
• Part No
• Description
• Vehicle Model
• Time Duration for Rent

F.        System Implementation
System implementation is an important step in the process.   In this step, the system is really implemented and put to use.  Once the system is implemented, it is expected to give good results without any problems. So we must follow the following steps while implementing the system.
1)  Load the software:This includes loading of VB.NET, MS-Access, which are necessary to implement the project.
2)  Implement the code: This includes implement the code for different modules. This essential connecting the Back End to the Front End.
3)  Integrate and test:In this step, the new system is tested for correctness by entering the data. A search is made for any errors, and if found steps are taken to remove them. DEMO TO THE User. Here the end users are given a demonstration of the new system and the feedback is taken from them, and suggestions from    them    can    be    considered    for furtherimprovement if found necessary.
4)  System testing: It is a critical component of software quality assurance and characterizes

the ultimate review of specification, design and coding. Testing includes verification of the basic logic of each program and verification that the entire system works properly. Testing individual programs involves an attempt to be sure that most likely path properly. Programmers facilitate testing by coding as evidently as possible.

5)  Testing objectives:
a)  Testing is a process of process of executing a program with the intent of finding an error.
b)  A good test case is one that has a high probabilities of finding an yet undiscovered error.
c)  A effective test is one that uncovers an yet undiscovered error.

6) Test plan: My project is to design that systematically uncover different classes of errors and to do so with a minimum amount of time and effort. Testing validates that software functions appear to be working according to specification, that performance necessities appear to have been met. In addition, data collected testing is conducted to provide a good suggestion of software reliability and the absence of defects, it can only show that software defects are present in it. When erroneous data are uncovers an error is implied and debugging commences. The plan is simply what data to provide to the module, and what result to expect.

7) Testing Methods
a) Unit testing:  Unit testing focuses verification effort on the smallest unit of software design the module and using the part design description as a guide, important control paths are tested to uncover errors within the boundary of the modules. After the source code has been developed, retrieved, and should be coupled with a set of expected results. Unit testing is simplified when a module with high cohesion is designed. The entire purpose of unit testing is to reduce the effort of integrating testing. The determination to develop stubs to unit test

high-level modules might swamp the benefit gained by testing them in isolation.
G.  Integration testing:
Integration techniques is a systematic technique for constructing the programming structure while at the same time conducting tests to undiscover errors are associated with interfacing. One method is to wait until all the units have passed testing, and then combine them and then tested. This approach is evolved from an unstructured testing of small programs. Another strategy is to construct the product in increment of tested units.

H.Debugging:Testing cannot display the absence of defects; it can only show that software flaws are present. When erroneous data are uncovers an error is implied and debugging commences. The debugging process is the most changeable part of the testing process.

## IV. CONCLUSION
Our project erases all the problems faced by the manuals stem and achieve its goal. Validation is done accordingly and the system is considered to be as interactive as possible. Listing them side by side provide all necessary options, any one of the desired option can be selected, and then corresponding option is performed. This is the perfect system for the  office showroom to manage the data and help their customers to buy a product without any problem.It makes the process of buying a car in very simple way. Finally, the system is implemented in the client(Nithya motors,Karaikudi)place. In Future Enhancement this application avoids manual work and the problem concerns with it. It is an easy way to obtain the information regarding the various products information that are present in that. Well I and my team member have worked hard  in order to present an improved website better than existing one regarding the information about the various activities.

TABLE I.  NUMBER OF ITEMS PURCHASED

| FieldName | DataType | Size |
|---|---|---|
| Id | Integer | 5 |
| Cust_id | Integer | 5 |
| Dispatch time | Text | 25 |
| Base amount | Integer | 5 |
| Deposit | Integer | 5 |
| Tax | Integer | 5 |
| Notes | Text | 25 |
| Location | Text | 25 |
| Distance driven | Integer | 5 |
| Total amount | Integer | 5 |
| Id | Integer | 5 |

The next enhancement that we add searching options we can directly search to the particular product company from that sites.In future we should add more modules and make the web application large volume of database oriented to the site.

## REFERENCES

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