

Vehicle Information Service using SMS

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Abstract— With the increasing importance of corruption has become a major factor to be considered as a result the number of vehicles and rapid development of population are growing in our everyday life. The process of developing Vehicle Information Service System Using SMS through Cellular Network has gained major attention by traffic police, RTO officers and public. Now a day's population has become a major factor to be considered as a result the number vehicles are growing with increasing problems of vehicle registration management, license registration, emission, insurance etc for RTO departments and to handle user and vehicle document verification by traffic police officers. Now a day's many people are purchasing two wheelers, four wheelers etc. So the RTO employees having lot of work burden of making registration, License issue, transfer etc., which required lot of paper work. As a result people cannot get the things done in right time, which waste the time, energy. Similarly the vehicle owner sometimes forgets to carry the license, and forgets the insurance date at the time of enquiry.

Key words: SMS, RTO, Vehicle Information Service

I. INTRODUCTION

Vehicle Information Service Using SMS is an Automation of Road Transport Department through Cellular Network will make it easy for RTO[1] professionals to manage and administrate internal office data and also access it on field during enquiry via Mobile SMS. Our paper work allows in office data entry professionals not only to key in the data but to also edit, update, delete information. It also enables officers to pay fine which generates fine amount automatically with status such license type, date, paid or unpaid status forms and display vehicle license, registration.

On the other hand it also provides the on field officials to access data from the Database on server by just using a Cellular Phone SMS which will fetch data from a server that is physically present on the server with device and location independence. This means that the user with a mere knowledge of operating a mobile can access information at his fingertips within a few seconds without physically visiting or accessing the data from the RTO database server present on server. Vehicle Information Service Using SMS is an advanced "RTO management system" which is designed keeping in view to make the existing registration and insurance system easier and faster [7]. It includes the entire registration and insurance procedure starting from the initial phase of entering till the results. It is more reliable, accurate, time saving and free from any misuse. The system provides information regarding the RTO application and its status. The tedious jobs such as verifying all the records of the applicant, confirming all the personal details are furnished, submission of qualification documents, driving license, registration details, etc., are done in the most convenient way to the administrator. Also security is being provided in the most proficient way.

II. SYSTEM ARCHITECTURE

In this section we will explain the architecture and system modules:

Large systems are always decomposed into subsystems that provide some related set of services. The initial design process of identifying these subsystems and establishing a framework for subsystem control and communication is called Architecture design and the output of this design process is a description of the software architecture. The architectural design process is concerned with establishing a basic structural framework for a system. It involves identifying the major components of the system and communications between these components. The following subsections delve the design aspects and the subsystems involved in this software package.

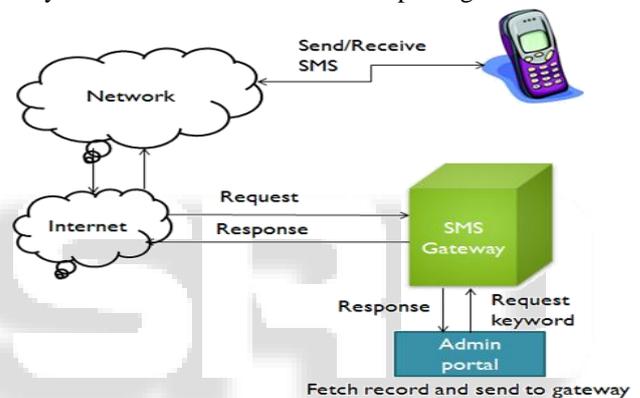


Fig. 1: Architecture

"VIS" is an Automation of Road Transport Department through Cellular Network. We are proposing a model in which we aim to provide better services through cellular phones.

III. SYSTEM MODULES

A. R.T.O Module:

This is the first module of our paper. It is mainly used to maintain Vehicle and Driver information. It contains information regarding Driver's License, Vehicle Registration, Insurance and Emission information. It is an integration of several modules. It consists of four sub-modules namely License Registration, Vehicle Registration, and Insurance [4]. It also provides a facility to generate fine on the same system. The main advantage of this module is that the fine details are stored in the court module immediately when the fine is generated. It also sends a sms to the registered contact no. of the vehicle. It consists of three modules namely Check License, Check Vehicle and Generate Fine. The RTO module consists of the following sub modules:

- 1) The License module includes all the information regarding applicants personal details like Name, DOB, Address, Contact no. Identity marks, Photo and also license details such as Type of license, License

status and Validity of the license. It is also responsible for adding and managing license related records to the database [5].

- 2) The Vehicle module includes all the information regarding Vehicle details like Vehicle Registration no., Manufacturer Name, Model Name, Purchase Date, Fuel Type and so on. It also includes the Vehicle Owner details like Name, Address, Contact no. It is also responsible for adding and managing vehicle related records to the database.
- 3) The Insurance module includes all the information regarding Vehicle details like Vehicle Registration no., Manufacturer Name, Model Name, Purchase Date, Fuel Type and soon. It also includes the Vehicle Owner details like Name, Address, Contact no. It also includes Insurance related information like Company Name, Policy no., Validity. It is also responsible for adding and managing insurance related records to the database.
- 4) The Emission module includes all the information regarding Vehicle details like Vehicle Registration no., Manufacturer Name Model Name, Engine Capacity, Fuel Type and soon. It also includes the Emission details like Center Name, Emission Id and Validity. It is also responsible for adding and managing emission related records to the database.

B. Request Handling Module:

Capture the request like Vehicle number (MH04GB4917) and type if any. It process with database and search record if record available then it fetch all information related to request .Send response to user through SMS

C. Reporting Module:

It provide the report for vehicle information System data Access vehicle detail report .Deactivate vehicle report Service used mobile list report Admin rights report Vehicle number wise report download

D. Search Module:

It allow to search record according to provide filters like, search according to a date wise vehicle added. Region wise vehicle detail. Search vehicle number. Search mobile number.

IV. FLOWCHART

A. Administrator:

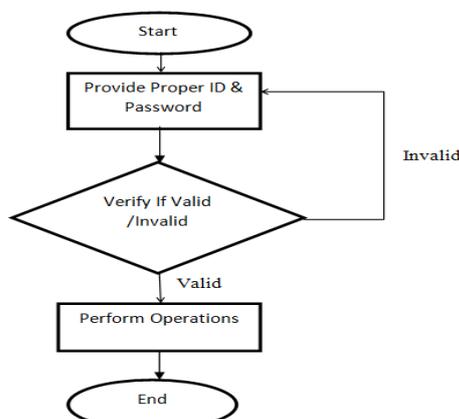


Fig. 2: Administrator

B. User:

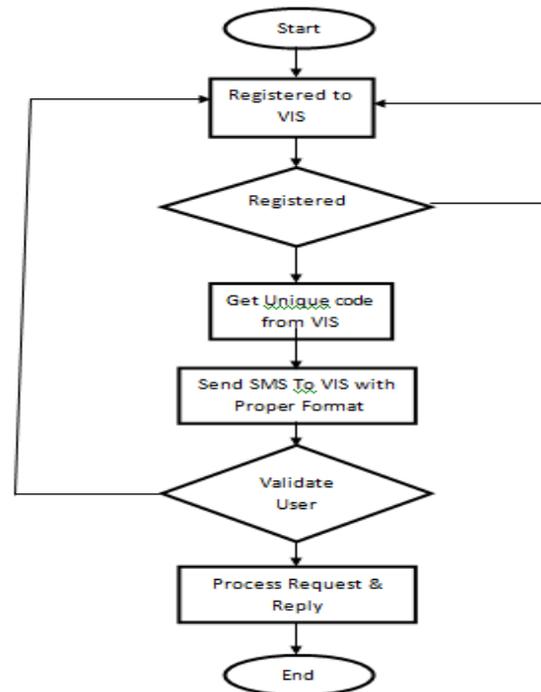


Fig. 3: User

V. CONCLUSION

It can be concluded that our project "Vehicle Information Service Using SMS" which is an Automation of Road Transport Department through Cellular Network was successfully developed and tested by our team. Our system introduces a facility for the R.T.O Officers to perform verification of the License and Vehicle documents electronically. It will also help the R.T.O officials to maintain records systematically and reduces a lot of paperwork and manual efforts. We also identified some general requirements of such a system and tried to meet those requirements as much as possible in the design and implementation of our system.

VI. FUTURE SCOPE

In future, as per the user's requirement our whole Program was designed. It provides a better way of document verification for R.T.O officials. Our system is an integration of several systems that in present act as a separate system. The future system Maintains detail information of Driving License, Vehicle Registration, Emission and Insurance information of related vehicle. It will also reduce a lot of clerical works and provides better accountability. A separate sms gateway can also provide fine notification messages at the flex module. We can also add a provision to track stolen vehicle in the future systems either through verification or through GPS tracking.

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