RTO TRAFFER

Nayan N. Ghodake¹, Kalyani K. Nikam², Pratiksha R. Sonawane³, Pratik D. Shirsath⁴, Prof. Kiran K. Patil⁵

¹ Department of Computer Engineering, P.V.G's College of engineering, Nashik, Maharashtra, INDIA

² Department of Computer Engineering, P.V.G's College of engineering, Nashik, Maharashtra, INDIA

³ Department of Computer Engineering, P.V.G's College of engineering, Nashik, Maharashtra, INDIA

⁴ Department of Computer Engineering, P.V.G's College of engineering, Nashik, Maharashtra, INDIA

⁵ Department of Computer Engineering, P.V.G's College of engineering, Nashik, Maharashtra, INDIA

ABSTRACT

The process of developing RTO Traffer, Automation of Road Transport Department through Cellular Network has gained major attention by traffic police, RTO officers and public.

Now a day's population has become a major factor which is considered as a result the number of vehicles are growing with increasing problems of vehicle registration management, PUC, insurance etc. for RTO departments and to handle the users and vehicle documents verification by traffic police officers. It is little difficult to handle this process in a proper way. Also Now a day's many people are purchasing two wheelers, four wheelers etc. So the PUC and Insurance firm having lot of work burden of making registration, PUC issues, Insurance issues 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, PUC and forgets the insurance date at the time of enquiry. 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. To destroy the corruption these application can be developed. Using this application we can manage the people's data in proper manner. The RTO TRAFFER, which is design to make the registration for PUC and INSURANCE easier and faster. This project, is use to Register, Renew the PUC and INSURANCE with the concept of MySal, SOLite as a database.

Keyword : - *Cloud computing*, *AES*, *Php*, *Wamp*.

1. Introduction

Regional Transport Office (RTO) is an Indian government bureau which is responsible for the registration of vehicles and issue of Driver's License in India. RTO management will be having lot of work regarding registration of vehicles and issue of driver's license. Similarly the vehicle owner sometimes forgets to carry the license, and forgets the insurance at the time of enquiry. This paper proposed an approach to solve such problems that is by storing all the information related to vehicle and driver at database by RTO administrator.

RTO Traffer is an advanced system which is design keeping in a view to make the existing registration of puc and insurance system easier and faster. It includes the entire registration of PUC and insurance procedure starting from the initial phase of entering till the result. It is a more reliable, accurate, time saving and free from any misuse. the system provide information regarding the RTO Application and its status the TDER job such as verifying All the records of the applicant , confirming all the personal details are furnish, submission of qualification documents, Insurance and PUC registration details, etc. are done in the most convenient way to the administrator. Also security is being provided in the most proficient way of the intermediate stages starting from the receiving of the application form to revealing the applicant number along with the expiry date of PUC and Insurance are being dealt.

Advantages of this application are- Considerably reduce the corruption in transport department. Keep the documents safely. In case of accidents helps to identify the injured person and also helps to find out stolen vehicle effectively.

To offer the drivers to be independent of vehicle related papers.

1.1 System Overview

Administrator is power user. He has the power to verify the data entered by user, processing of data and provide appropriate solution. Any person who is authorized by the administrator. An authorized user should have a user name and password to access the detailed information from the site excluding for accessing general information is shared, public pages. User is the person who gets the full benefits of this application. By introducing the new system we have been organized some striking felicities.

Registration of PUC and Insurance through online. Issue of information about vehicles details which include owner of the vehicle, his/her information, license details, vehicles documents details like PUC and Insurance and other information's. It helps for Public awareness. Separate Account for Police, PUC Firms and Insurance organizations. Provide mail and message alert for users about PUC and Insurance Expiry.

1.2 Objective of the Project

As a total manpower based system is currently running for the whole procedures, designing a new system which makes the whole process online, demands a deep knowledge about the existing system. Throughout the project we focus on presenting information and commands in an easy and intelligible manner. The purpose of the RTO Traffer is to provide the leading technology tool for ease of RTO functions such as Registration, Verification, and Validations etc. It will reduces the difficulties which is faced on existing system, with minimum errors and difficulties.

2. Existing System

Existing system all client vehicle information recorded in written format so Manual work is required to fill up the vehicle information.

All documents is in written format so the particular record of vehicle cannot be easily find and also Difficult to find the unverified documents of a vehicles for PUC and INSURANCE. Sometimes PUC center cannot conduct the vehicle smoking density test and give the PUC receipt to the client. So the pollution become increase. To stops this pollution we implement system centers that grant PUC certificates to vehicle owners with conducting stipulated test. When document are expired then No alert messages is send to the client.

2.1 Proposed System

Proposed system is online system. So any person related to organization, firms or police can browse the sit and upload the documents. Less time consuming. Highly secure in data storing. It can avoid the intermediate persons and Institutions. Helpful in traffic issues: Authorized users can trace the vehicle in accident cases using their register number. It is more user friendly: the section such as home screen and searching etc. are combines together in a single window. Massages about expiry of documents will help the users to renew it within a time. In the Online system the repetition of work and duplication of data can be avoided.

The "RTO Traffer" has been designed to automate the process of registration of documents like PUC and Insurance of vehicle and issuing the documents. System can make the daily activities efficient and providing fast response to store and retrieve information.

Following information shows the details of RTO Traffer system

- User's
- Login
- PUC Issue
- Insurance Issue

2.2 Scope

Nowadays life is becoming faster and faster so there is need to make all R.T.O. related processes like getting vehicle information's, owner information, registrations of new vehicle documents or regular vehicles documents like PUC and Insurance within less time consuming.

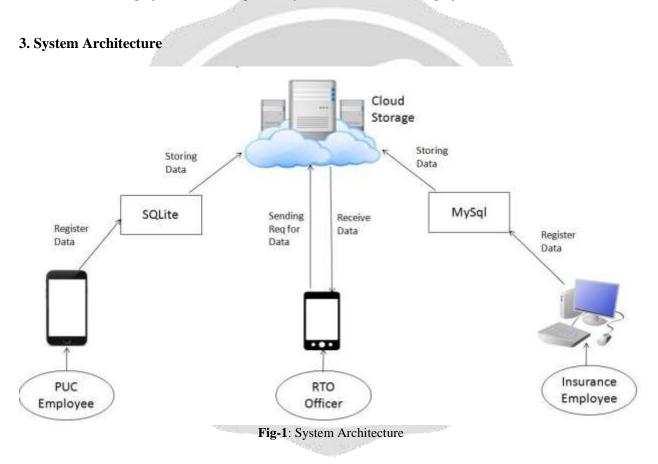
There is need of storage of data duplication free and retrieval efficiently. This system provides better interaction between the all actors who will take part in that system. Data related to vehicles, owner of vehicles, registration information can get easily from system.

Extensibility:

This software in a way is extendable that its original developers may not be expect. The following principle enhances extensibility like hide data structure, avoid traversing multiple links or methods, also avoids the case statements on object type and distinguish public and private operations.

Reusability:

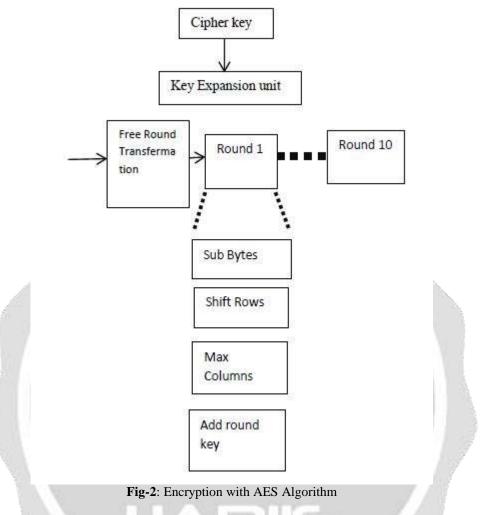
Reusability is possible as and when require in this application. Reusable software reduces designs, coding and testing cost by amortizing effort over several designs. Reducing the amount of code also simplifies understating, which increases the likelihood that the code is correct. We can follows both types of Reusability: Sharing of newly written code within a project and reuse of previously written code on the new projects.



3.1 Algorithm

Advance Encryption Algorithm

Advance Encryption algorithm AES is also known as Rijndael. AES is announced as U.S FIPS by NIST in 2001. In AES, different size of key is used i.e. 128, 192 or 256 bits depends on how many cycle it uses. For 10 cycles it uses 128-bit key, for 12 cycles 192 bit key and for 14 cycles 256 bit key is used. All rounds of AES algorithm are similar except the last one. AES works on 4x4 matrixes. AES are consists of key expansion, initial and final round. Initial round consist of Add Round Key, Sub Bytes, Shift Rows, Mix Columns and final round also consists of similar function as initial round except mix column. AES works fast on both software and hardware.



4. CONCLUSIONS

The application is designed in such a way that any further enhancements can be done with ease. The system has the capabilities for easy integration with other systems. New modules can be added to existing system with less effort. The system has eight classes. And each of these classes having various procedure and functions. In future a new functions or procedure can be easily added in the system through these classes. A new class can be added. The system generates only limited number of reports. If more detailed report are required then the system can be directed. Even though the system having well communication facility, it's not enough. The mail service can be enhanced with feature bcc, cc etc. the system has full security.

5. REFERENCES

[1]. Jawahar Thakur and Nagesh Kumar, 'DES, AES, Blowfish: Symmetric Key Cryptography Algorithm Simulation Based Performance Analysis', International Journal of Emerging Technologies and Advanced Engineering (IJETAE). December (**2011**), ISSN: 2250-2459 Vol. 1, Issue 2.

[2]. Sandipan Basu, 'International Data Encryption Algorithm (IDEA) - A Typical Illustration', Journal of Global Research in Computer Science. July (**2011**) ISSN: 2229-371X Vol. 2, Issue 7.

[3]. Neha Jain and Gurpreet Kaur, 'Triple Layer Security to Data in Cloud', VSRD International Journal of CS & IT. (2012), Vol.2 Issue 4, pp. 316 321.

[4]. Pratap Chandra Mandal, 'Superiority of Blowfish Algorithm', International Journal of Advanced Research in Computer Science and Software Engineering. September (**2012**) ISSN: 2277-128X Vol. 2, Issue 7.

[5].Rachna Jain and Ankur Aggarwal 'Cloud Computing Security Algorithm', International Journal of Advanced Research in Computer Science and Software Engineering. January (**2014**) Vol. 4, Issue 1.

