

# RTO Management System

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## ABSTRACT

The Regional Transport Office (RTO) is a government organisation responsible for issuing driving licenses, maintaining databases of vehicles and sells personalised registration of vehicles. It has been observed since years that the RTO is not able to deliver quality public services to the citizen without delay. That is, it has been a difficult job for citizens to get a driving license and to register their vehicles. Hence, this project is aimed at developing a computerised system for the functioning of RTO. This system will reduce the manpower required in the RTO and make the existing system fast and efficient. The aim is to build a user-friendly webpage where the citizens can apply for learner's license, driving license and vehicle registration. The webpage also provides provision for citizens to submit their complaints.

## **1.Introduction**

RTO (REGIONAL TRANSPORT OFFICE) is a government bureau which is responsible for the registration for vehicle and issues of driver licence in India. The

purpose of this project is to create an application for RTO services. This application provides

registration for the license, vehicles registrations and other documentation. In this application investigation functions like checking of license, documents etc. for help of RTO officers are provided. By using this android application traffic police can verify the whole details of person and vehicle.RTO management will be having lot of work regarding registration of vehicles and issue of driver's license insurance. Similarly vehicle owner sometimes forgets to carry the license at time of enquiry. To solve such problems that is by storing all the information related to vehicle and driver at database by RTO administrator.

## **Objectives**

- ▶ Facilities ease of operation.
- ▶ Ensure data integrity and security.
- ▶ Less manpower.
- ▶ Generate accurate reports.
- ▶ Accurate handling in multiple details of multiple customers.

## **2. Existing System**

Today, making of driving license is large time consuming process. Also every time, it is not

possible to carry whole documents by driver. Current vehicle registration systems for RTO services are very critical & there is no any updating to RTO office. Totally whole processes are conducted manually. In current market there are no any applications to provide all the above features together in one application. We all know existing RTO office work is how much lengthy as well as very time consuming process. In many villages there is only one day camp of RTO and the people who want driving license they should remain present on that day if they missed that day then they have to go to the district RTO office. So it is disadvantage because that may be not able to go or he having work on that day. so that here we are developing one web application which provide easiest and efficient way for RTO works like making driving license, insurance of vehicle, registration number of vehicle etc.

In many cases we found that RTO office work get complete through third party called agent. When a person go to the RTO office for driving license, vehicle passing, and registration number of vehicle then a person go through the agent and agent will complete person work by taking lot of money and that person is unaware about all this system.

The present system has following drawbacks:

- ⇒ It is not efficient in performing office work in RTO services.
- ⇒ It includes much manual process and time consuming.
- ⇒ It is not user friendly.
- ⇒ Maintains local data base.

- ⇒ It is not Generating Accurate Reports.

### **3. Proposed System**

As the project is an attempt to make the existing RTO system fast and efficient, the built online RTO website provides numerous functionalities makes the job of the RTO officials easier and helps the citizens of the state in the most efficient way. From this, citizens get their job done as soon as possible in a systematic way with no difficulties, whether it may be acquiring license or registering their vehicles or submitting queries. To overcome problems in the existing System a new RTO services “Road Transport Authority Information System” is proposed after study of system.

#### **The objectives of proposed system are:**

- ⇒ Facilities ease of operation.
- ⇒ Ensure data integrity and security.
- ⇒ Less manpower.
- ⇒ Generate accurate reports.

### **4. Methodology**

#### **Modules Used:**

- 1) Apply for Learner’s License
- 2) Apply for Driving License
- 3) Vehicle Registration
- 4) Application Status check
- 5) Complaints/query submission
- 6) Information section
- 7) Gallery section

#### **Module Description:**

##### Apply for Learner’s License

Citizen who craves for a Driving License (DL), starts by applying for a learner's license registration (LLR) through their Aadhaar number and a password which will be used for authentication of the citizen in the future. The system is expected to allow only those citizens who are 18 years old or above for registration. All the minor applicants will be denied of further processing. Once age is verified, the citizen is asked for the category of vehicle (COV) for which he/she wants to apply. After selecting COV, the system will generate an appropriate date, exam ID, exam password and venue for the LLR test. The venue for the test is decided based on the citizen's address and accordingly, the nearest RTO office is assigned as the test venue.



Fig 1. LLR test date, ID, password and venue is generated after selection of COV by the LLR application.

### Apply for Driving License

To apply for DL, one citizen must wait until his/her LLR is approved by the RTO Inspector. If the citizen fails to pass the LLR test, the LLR of that citizen will be rejected by the RTO Inspector. In that case, the citizen must re-apply for LLR if he/she wants DL. Once the citizen has received his

LLR, he/she can apply for driving license, again through their Aadhaar number and a password as in the case of LLR. The system will check whether the LLR issued period is more one month and less than six months or not. If the LLR issued period is less than one month, the citizen will be asked to wait till one month completes. If the LLR issued period is more than six months, the system will ask the citizen to re-apply for LLR. On a legitimate time of the LLR, the citizen will be asked for the COV to match whether LLR has been issued for the same COV for which the citizen is applying driving license for. On a correct match, the system will generate the test date, test ID and test venue. In this case also, the venue for the test is decided based on the citizen's address and accordingly, the nearest RTO office is assigned as the test venue.



Fig 2. If LLR issued period is less than one month, asks the DL applicant to wait for one month

### Vehicle Registration

This section is for the citizens to register their newly bought vehicles. The citizen will be asked to apply through their Aadhaar number and a password to be used for authentication. The citizen will be asked to submit the details of the vehicle such as the category of vehicle, vehicle company and the vehicle model. After the details are entered, the system will generate an appropriate

date for the documents verification at the nearest RTO office. This section is for the citizens to register their newly bought vehicles. The citizen will be asked to apply through their Aadhaar number and a password to be used for authentication. The citizen will be asked to submit the details of the vehicle such as the category of vehicle, vehicle company and the vehicle model. After the details are entered, the system will generate an appropriate date for the documents verification at the nearest RTO office.

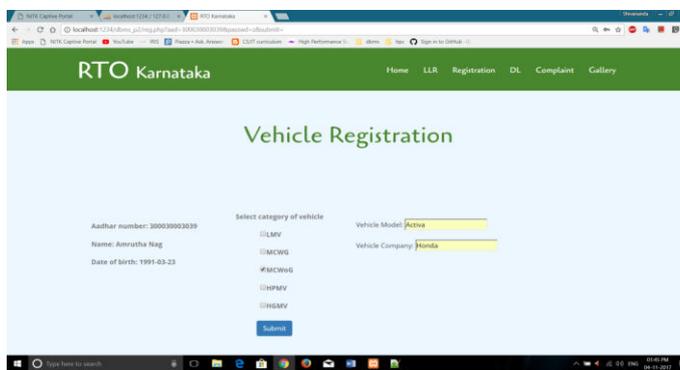


Fig 3. Applicant will be asked to submit COV, vehicle model and company

Application Status Ckcek:

Using this functionality, citizens can monitor the status of their LLR, DL and vehicle registration application whether it is approved or rejected. To check the status, citizen must enter the Aadhaar number and password entered while applying. In case of LLR, citizen can also download the approved learner’s license.



Fig 4. Status of LLR which is approved with a print option

**5. Applications**

- ⇒ For vehicle carriers person.
- ⇒ For license registration.

**6. System Architecture**

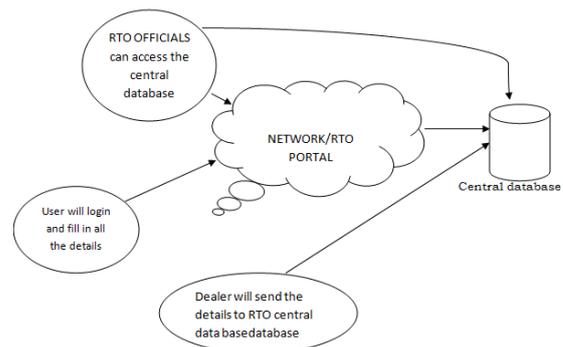
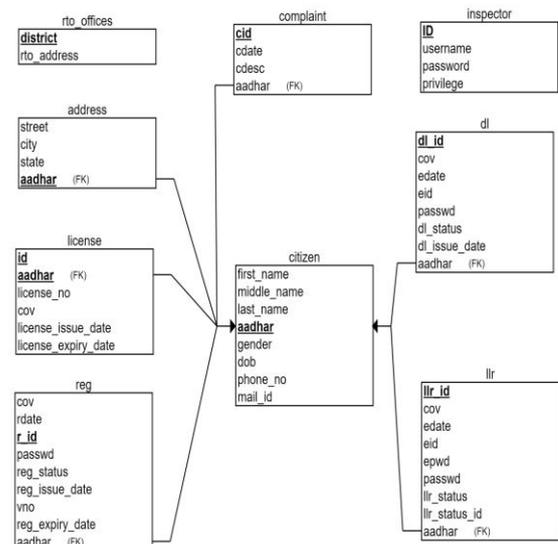


Fig5: System Flow

**7.Relation Schema**



## 8. Advantages

- Time efficient method.
- Registration certificate would be generated online, so it will be safe and can be downloaded again ,if lost.
- Relaxation from the paper work.
- No need of an official from RTO to visit the dealer.
- Owner need not visit the RTO to apply for the registration certificate.
- Corruption will not prevail.

## 9. Implementation

The whole project development was divided into two parts, the front-end development and the backend development. The front-end development was creating the RTO website with user-friendly interface. The backend development was to access the database stored on the server side and updating the same. In this project, MySQL is used as the backend database. We have used HTML, CSS, JavaScript, Bootstrap for the front-end implementation. Next, PHP is used as server scripting language to access the database and update it. The project is run on a local machine with the help of XAMPP application which provides Apache HTTP server and MySQL as the backend database. The database is accessed and updated using the MySQL queries in PHP scripts. The MySQL queries used to implement the project include SELECT, INSERT, DELETE, UPDATE and JOIN.

## 10. Conclusion

The implemented project RTO Management System brings out an improvement over the existing RTO system by reducing the processing delay and allowing RTO to provide quality of service to the citizen. It overall increases the efficiency of the RTO office and effectively reduces the burden on the RTO officials. People need not stand in long queues just to apply for LLR or DL at RTO offices. All this pre-registration task can be done online through the implemented system. Any doubts or queries can be submitted which will be responded by the officials. This project even eliminates the presence of middle man from the entire process and thereby decreasing the degree of corruption in the state. The other ways in which the system helps is by publishing the latest news and events. The project is mainly built using web scripting languages. So, in the future, updating the system or adding extra features to the system as per the requirements will not be difficult as simple web scripting languages will help us in accomplishing it. The implemented project RTO Management System brings out an improvement over the existing RTO system by reducing the processing delay and allowing RTO to provide quality of service to the citizen. It overall increases the efficiency of the RTO office and effectively reduces the burden on the RTO officials. People need not stand in long queues just to apply for LLR or DL at RTO offices. All this pre-registration task can be done online through the implemented system. Any doubts or queries can be submitted which will be responded by the officials. This project even eliminates the presence of middle man

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## **11. References**

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