Virtual License
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Abstract:
In India, the driving license is the official document which authorizes its holder to operate various types of motor vehicle on roads to which the public have access. In various Indian states, they are administered by the Regional Transport Authorities/Offices (RTA/RTO). A driving license is required in India by any person driving a vehicle on roads to which the public have access, defined in the Motor Vehicles Act, 1988. A modern photo driving license can also serve many of the purposes of an identity card in non-driving contexts (proof of identity (e.g. when opening a bank account) or age (e.g. when applying for a mobile connection)). Now a day this license comes as smart card. This smart card have chip which contain all information regarding holder. This system is really very good over previous system. It reduced consumption of paper, made data computerized, made system little bit transparent than previous system. In previous system licenses were issued on small booklet with stamp of authorities. The aim of this research paper is to introduce new concept about license and its benefits over existing system. Concept is to reduce time required for issuing license and cost required for maintains. And also aim is to create system more users friendly and more reliable. The proposed idea is to use smart phone and government provided DigiLocker app for more conveniences of both user and the government.

Keywords: virtual license, DigiLocker app

I. INTRODUCTION
In today’s day to day life, motor vehicles are one of the important members for Indian family. But to use this member, you need government approved license. Now a day this license comes as smart card. This smart card have chip which contain all information regarding holder.

This system was really very good over previous system. It reduced consumption of paper, made data computerized, made system little bit transparent than previous system. But still have many disadvantages. Main disadvantage of this system is material use for it, Plastic.

Plastic helps these cards to last long. But over time effect, it starts losing color which makes them hard to recognize after some time. These cards have metal chip to store data about owner. But due to physical effects, this chip starts catching rust over it and makes it unreadable.

Also there is possibility of card get stolen or lost or even break. In such case, procedure for applying new smart card is very long and complex. This is user’s point of view towards smart card. Police officers face different problems by this system. Main problem is people take color copy and submit it when officers catch them.

Initially it was difficult to make fake license. But now it is very easy to produce duplicate license. As chips quality is degrading over time effect, it is impossible to fetch data to police officers even it is original license.

II. CURRENT SYSTEM
Current system is partially manual and partially automatic. Working of this system is explained below:
Applicant registers itself on website and upload required documents. On successful registration system provides schedule for document verification and learning license test. On scheduled date, applicant must present in local RTO office for learning license test.

If applicant clears test and hold proper document, will be eligible for learning license. System later prints license. But applicant generally receives this after minimum two days. This is disadvantage, as applicant must need to go to RTO office to receive this license and applicant lost minimum two days in just waiting. After minimum one month period applicant registers for driving test. System provides schedule for this driving test.

On schedule date applicant appeared for test. After clearing test applicant again visit RTO office and pay fees for test and license. After this system prints license and post to applicants address. Again here disadvantage is this printing and postage process takes minimum seven days to a month.

Sometimes there is chance of misplacement while posting license to applicants address. This cost so much money to government every year. From applicant’s point of view, sometimes testing site and main RTO office are located at different locations. So applicant must present at test site and later flew to RTO office for payment. This is quite time consuming.

But this system has few disadvantages; Applicant must need to go to RTO office to receive this license and applicant lost minimum two days in just waiting. Printing and postage process takes minimum seven days to a month. Sometimes there is chance of misplacement while posting license to applicants address.

This cost so much money to government every year. From applicant’s point of view, sometimes testing site and main RTO office are located at different locations. So applicant must present at test site and later flew to RTO office for payment.

This is quite time consuming. Also duplicate production of this kind smart card is very easy. Such duplicate cards are used by terrorist and illegally immigrating people to gain access in India.

These kinds of people are very dangerous for any country. Because using this duplicate license they can prove their fake Indian nationality and get hand on other nationality proofs like passport.

### III. PROPOSED SYSTEM

Government of India provides system called as DigiLocker. This system facilitates users to store any kind documents in the vault.

User can store documents like Ration card, AADHAR card, PAN card and many other documents. It is very useful system to share these documents with others.

So using this system this minor upgrades I proposed following system flow:

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**Figure 2. Flow of proposed system**

Applicant will register itself on website. While registering, will provide all information needed and also upload required documents. System will register applicant and generate schedule for document verification and learning license test. On assigned date, applicant must be present in office to verify document, attend test and for photo shoot. Once applicant clears test, system will generate unique QR-code, login id and to the applicant email and link for DigiLocker app. Once applicant gets this email, can download DigiLocker app and get learning license. After one month, system will keep reminding about driving test. If user keep ignoring, after six months system will automatically cancels applicant’s registration and need to do all processes once again. Within period of six months, applicant will appear for driving test. If it clears driving test according to officer, he/she will change applicant’s license status to permanent from learning. Validity will be varying depending on type of license. If validity is about to expire within a month, app will keep reminding user for renewal until user take proper action. This reminder notification cannot be skip. If user ignores this warning and
didn’t renew license, system will automatically cancel license and user must start from step 1 to apply for new license.

III. ADVANTAGES:

From governments view:
It will reduce lots of paper work and time required for entire process. Also reduces cost required to produce smart card, its printing and postage. Users’ data will be centralized. If required, other branches can also access this data and it can also connect with other systems like AADHAR. As data is stored on government side, users’ data will be secured. As computer system generating QR-code and login credentials, there is minimum or no chances of human error. This license generated by computer system and only accessible through mobile app, so there is no chance fake or dummy license.

From users view:
Users do not need to carry license physically. User just need government provided DigiLocker app in mobile with valid credentials. It is not time consuming for the entire process of registration. Even if user lost device, can also access DigiLocker from other device with same credentials. It means there is no chance missing license anymore. A general notification will be popped up on user’s phone regarding his license which will keep him updated with the status.

IV. COMPARISON

In current system, applicant must need to go to RTO office to receive license and applicant lost minimum two days in just waiting. Printing and postage process takes minimum seven days to a month. Sometimes there is chance of misplacement while posting license to applicants address. According to our system, applicant don’t need to wait to receive license as he/she only need to download app, enter valid credentials and will get license whether learning or permanent. Also there is no possibility of misplacement as no actual delivery is occurring. It also saves cost required for printing and postage. Main disadvantage of current system is duplicate production of smart card is very easy. Such duplicate cards are used by terrorist and illegally immigrating people to gain access in India. These kinds of people are very dangerous for any country. Because using this duplicate license they can prove their fake Indian nationality and get hand on other nationality proofs like passport. But according to our proposed system, these types of frauds are totally impossible. Reason behind this is that well developed computer program is handling entire system. This program and system will be on secured sever which is only accessible to the government and authorized personnel.

V. CONCLUSION

The aim of this research paper was to introduce our new concept about license and its benefits over existing system. Concept was to reduce time required for issuing license and cost required for maintains. And also aim was to create system more users friendly and more reliable. The proposed idea is to use smart phone and government provided DigiLocker app for more conveniences of both user and the government.

VI. REFERENCES

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