ABSTRACT

This document offers a standardized mechanism to issue government documents to license holders in digital format and store them. This allows government-issued documents to be moved to electronic form and make it available for real-time access in a set of “digital repositories”. You may not need to carry physical document such as license, PUC, RC Book, Insurance. By using advance login (Using fingerprint) and Adhar card Scanning, it will get an image of the finger and then it determines the pattern in an image, matches the pattern in pre-scanned images.

The document verification will be done by OCR (Optical Character Recognition). It will scan vehicle-related documents electronically and will convert images of a text to the characters. Reduce administrative overhead of Govt. departments and agencies and make it easy for the residents to receive services. If that is authenticated user then their documents will be fetched into the verifier application.

Keywords: PUC (Pollution Under Control), RC (Registration Certificate).

1. INTRODUCTION

Driving License, Vehicle Registration certificates, PUC (Pollution Under Control), Insurance can now be accessible through smart phones. By using this application then they no longer need to carry around physical documents.

Digital Infrastructure:

This application contains two sub-applications: One is user application (Advance Digilocker) which will be installed by the user and other is verifier application (Vehicle Verification Application) which will be installed by government officer (traffic police).

A. User Application

In user application, by using advance login (Using fingerprint) and Adhar card Scanning, it will get an image of the finger and then it determines the pattern in an image, matches the pattern in pre-scanned images.

There are four main facilities: license, RC book, PUC (Pollution under control), Insurance. When user will fill the information then the QR code will be generated. Verifier application act like a scanner. It will scan the QR code generated in the user application

B. Verifier Application

In verifier application, the document verification will be done by OCR (Optical Character Recognition). It will scan vehicle-related documents electronically and will convert images of a text to the characters. Reduce administrative overhead of Govt. departments and agencies and make it easy for the residents to receive services. If that is authenticated user then their documents will be fetched into the verifier application.
If traffic police want to check vehicle documents of a user then he will simply scan the QR code in user’s application and then all the documents will be displayed on the verifier application.

2. NEED FOR DIGITAL INDIA

Enable digital empowerment of residents by providing them with Digital Locker on the hosting. It enables e-Signing of documents and makes them available electronically and online minimize the use of physical documents. It also ensures the authenticity of the e-documents and thereby eliminate usage of fake documents. Secure access to Govt. issued documents through a web portal and mobile application for residents. Reduce administrative overhead of Govt. departments and agencies and make it easy for the residents to receive services. Ensure privacy and authorized access to residents’ data.

3. SYSTEM ARCHITECTURE

Methodology and Algorithm Description:

OCR: Optical character recognition is the mechanical or electronic conversion of images of typed, handwritten or printed text into machine-encoded text, when the documents get inserted into the advanced digilocker in the form of images, the characters get recognized with the help of OCR and extract the user’s information and documents get inserted into the application.

AES Algorithm: Advanced Encryption Standard AES performs all its computations on bytes rather than bits. Hence, AES treats the 128 bits of a plaintext block as 16 bytes. These 16 bytes are arranged in four columns and four rows for processing as a matrix. When documents get inserted into the user application then it gets encrypted by using AES algorithm and also decrypt the information when it gets fetch into the verifier application.

4. APPLICATIONS

- Citizens can access their digital documents anytime, anywhere and share it online. This is convenient and time-saving.
- It reduces the administrative overhead of Government departments by minimizing the use of paper.
- Digital Locker makes it easier to validate the authenticity of documents as they are issued directly by the registered issuers.
- Self-uploaded documents can be digitally signed using the eSign facility (which is similar to the process of self-attestation).

5. CONCLUSION

Advance Digital Locker scheme launched under the Ministry Of Road and transport is a good initiative taken by the Govt. of India to ensure safe custody of the important documents such as Driving License, PUC, Insurance, Smart Card/RC Book etc. which verify the Vehicle User electronically.

6. REFERENCES

[1] https://digitallocker.gov.in/