

# DESIGN AND DEMONSTRATE A DIGITAL ADDRESSING SYSTEM AS AN EXTENSION OF EXSISTING PINCODE

P.Nithya<sup>1</sup>, S.Nivetha<sup>2</sup>, B.Gayathri<sup>3</sup>, M.Pandi Thulasi<sup>4</sup>, A.Kanimozhi<sup>5</sup>  
UG Students <sup>1, 2, 3, 4</sup>, Assistant Professor<sup>5</sup>

Department of Computer Science & Engineering  
Kongunadu College of Engineering & Technology, Thottiam  
[tulasithiru11@gmail.com](mailto:tulasithiru11@gmail.com)<sup>1</sup>, [gayathribaskar3016@gmail.com](mailto:gayathribaskar3016@gmail.com)<sup>2</sup>

## ABSTRACT

The Process of developing a digital address database for the particular city. The digital address may be an alpha-numeric code or otherwise ,and shall have to be an extension of the existing PIN code system which defines the delivery jurisdiction of a post office .Latest GIS technology ,along with data analytics need to come together to develop the digital address database .The database format ,manner of data collection. At the end of this exercise ,we will have unique name ,nomenclature ,code given to each locality ,sub-locality ,street ,block ,society ,building ,house ,property in the city .And each property will now carry an address which is standard ,complete ,correct ,comprehensive. Verification of the information related to the mapping of physical address with the digital address. Digital Address System will do away with the complexity and hassles of providing multi-lime, often misspelled addresses, searching and navigation to the doorstep of addresses in areas with confusing and conflicting address naming and ordering systems. ELOc will help the computer search, share and navigate to destinations exact doorstep far more easily and quickly.

## INTRODUCTION

The innovate , patent -filed for this world-class solution completely aligns with The Honourable Prime Minister Shri Narendra Modi's vision for SMART city, DIGITAL India & START-UP India .It's a one-step solution to all the problems associated with poor postal addressing .As we all know, poor addresses result into "undeliveries"of the items and services. "undeliveries"result into huge economic loses and wastage of time &efforts. In its push for digitization, government will soon digitally map residential and professional addresses of citizens. Under the eLOc project, the government will assign a twelve-character alphanumeric digital address to a physical location. The twelve digits alphanumeric digital address for a physical property can be used parallely to the existing postal address .Every address now has a 6 character code attached to it mapped to the most comprehensive ,granular & accurate map dataset for the particular city.

The Department of posts has been permitted for two postal pin codes .The digitally mapped addresses can be help to the computer search, share and navigate to a destination's exact doorstep far more easily and quickly, it will also reduce considerable time and money for business in the e-commerce and transportation space .New locations or addresses can be added or existing ones can be edited, if the address have changed. We truly support the Government of India with its digital India initiative. It is supplemented by services such as primary data collection and verification in the field, affixation and house-numbers, and we can also provide data, attributes, high-resolution images and Real View as a service.

## LITERATURE SURVEY

[1]"Digital Payment in India: The Road Ahead" (2017) Ashish Das

Rights protection can be potentially prevented. Consequently, it has been decided by governmental institutions in Europe and the U.S. to include digital biometric data in future ID documents. In India, biometric based UID scheme, Aadhar is started with the goal of issuing a unique identification number to all the Indian citizens. This Aadhar number can be used in executing all the money transactions related activities including all types of purchases, sales, money transfer, hotel bills, hospital expenses and air tickets etc. Therefore, the Aadhar based smartcard system will help the South Asian countries in coming out of corruptions and improving their economies.

**[2]"Aadhar based smartcard system for security management in south Asia" (2016) Kamta Nath Mishra**

Recently biometrics is merged into digitization technology to improve the credibility of the conventional watermarking techniques. The access control and authenticity verification have been addressed by digital watermarking biometric authentication systems. By embedding biometrics in the host, we can formulate a reliable individual identification system as the biometrics possesses. Hence, the conflicts and problems related to the intellectual property rights protection can be potentially prevented. Consequently, it has been decided by governmental institutions in Europe and the U.S. to include digital biometric data in future ID documents. In India, biometric based UID scheme, Aadhar is started with the goal of issuing a unique identification number to all the Indian citizens. This Aadhar number can be used in executing all the money transactions related activities including all types of purchases, sales, money transfer, hotel bills, hospital expenses and air tickets etc.

Therefore, the Aadhar based smartcard system will help the South Asian countries in coming out of corruptions and improving their economies.

**[3] Online banking in India: Attacks and preventive measures to minimize risk (2014) Rajeshree Khande, Yashwant Patil**

This paper presents Online banking attacks, security analysis of Internet banking. Several modern models are evolving and being applied to many banking systems for preventing and detecting online banking frauds. However, they have no effective detection mechanism to identify valid users and trace their unlawful activities. Also they are not secure enough to prevent fraudulent users from performing fraudulent transactions over the Internet. This paper discusses the various types of online banking attacks and preventive measure to minimize the risk and to deal with these attacks.

**[4] Multipurpose Smart Card system (2014) Yoso Adi Setyoko I.G.B. Baskara Nugraha**

The usage of smart card is very popular in the world. Some institutions use smart card to support their business for example, identity card, stored digital money. This paper proposed design multipurpose smart card to create identity card and payment transactions. The design make smart card doesn't save some data directly in the smart card but in the server for account based system. Authentication process must be fast to serve many transactions on client. The existing technique like DSA, RSA, Elgamal in public key cryptography has more computation effort. This design would alternate public key cryptography authentication process with AE to increase the transaction speed and also keep to

secure transaction process. And then this implementation has small data size to be stored in smart card so support too many applications to be embed in this smart card.

**[5]"Online voting system for India based on Aadhar ID" (2013) Himanshu Agarwal, G.N.Pandey**

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**[6]"IPS-secure Internet payment system"(2005) Zoran Djuric**

The Internet is an insecure and unreliable communication medium - thus protection of sensitive data is needed. E-business systems inherently possess a higher degree of risk than mainstream applications, and thus require greater degree of security. Because of this risk, security should be considered a fundamental aspect of e-business system design. Especially big attention is dedicated to money transactions protection. There are dozens of electronic payment systems being developed to facilitate secure money transactions. The paper presents IPS

(Internet payment system) software implementation. Distributed system architecture allowed us to watch system segments as independent systems connected by corresponding communication protocol. Segments are: Web shop, payment Web segment, merchant server, payment gateway server and bank server. They communicate through secure communication tunnel, which consists of SSL tunnel and nested crypto tunnel. IPS use different cryptographic algorithms and techniques to achieve: privacy, integrity, authentication and non-repudiation.

## WORKING

In administrator side thus the physical address of each and every location to be stored which includes door number, street name, district name, locality, area and pin code with the name of location owner. Digital address to be generated uniquely for all physical addresses as an extension of the existing pin code in twelve digits for easy remembrance. User can register their changed address for the regeneration of digital address. This web application will be very much useful for location identification. Notification for the non-existing address to be displayed to the user if they entered any wrong physical address. In this web application thus the digital address for an interior villages also be generated. Here the location to be described in the major district under this taluk, town panchayat and total number of villages in the district to be showed to the user for the purpose of providing easy and attractive user interface.

## EXECUTION STEPS

### USER MODULE

User can see all those division details of Tamilnadu and they can contact an administrator in case of generating new digital addresses .user can leave their comment via the feedback if they felt uncomfortable with our website.In case of verification thus the physical

address of the corresponding digital address to be showcase to the user.

### ADMINISTRATOR MODULE

Administrator can maintain database to store all those physical address and corresponding digital address in a secured way .herein all those twelve digit code to be generated and maintained. All user feedbacks to be processed here

### CHANGE CONTROL MODULE

Module designed for user convenient, Herein user can register their newly changed addresses.

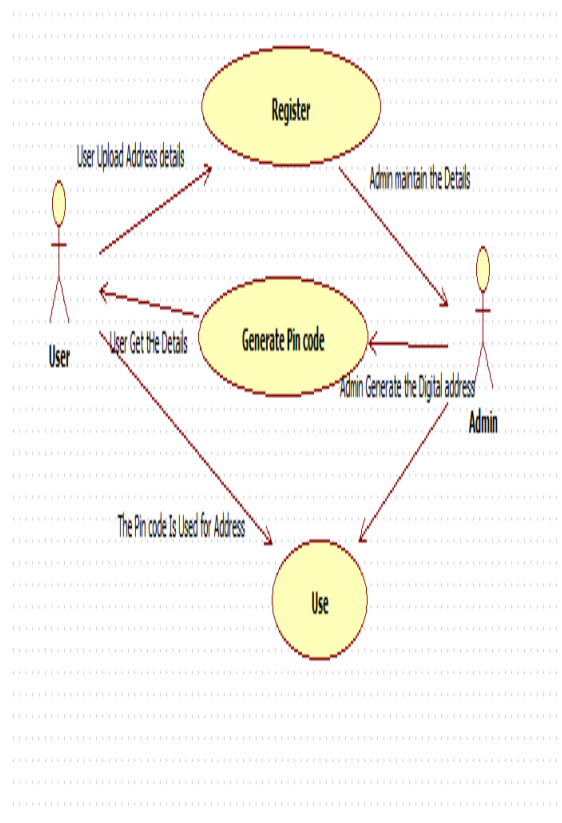
### FEATURES

The vision of Digital India programme is to transform India into a digitally empowered society and knowledge economy. The eLOc converts any address into simply 12 easy to remember characters (Eg.)Gain freedom from having to remember, type, tell or search for long, complex Indian addresses and confusing naming systems. Sharing the location/map of any place, door to door navigation, doorstep delivery taxi pick up and drop. In other hand will take you to the exact doorstep, making you more efficient, smarter and happier. Enhancing efficiency in the delivery logistic-thus reducing wastage of citizens. Efficient collection of property/water tax-will help improving quality of urban services, Identifying properties not registered with Property Tax will increase income for local body, Keeping record of buying/selling of each property instant, digital search report possible, Enhancing percentage of voting due to timely delivery of cards by linking digital address with voters card, Identifying Benami properties by linking digital address with Aadhar card, Identifying double LPG households by linking digital address with LPG consumer number, Controlling duplicate morage bank-loan on same property by linking digital address with bank, Facilitating in Smart Commute, Smart City Transportation digital addresses for every landmark.

## DIGITAL ADDRESS GENERATION

Twelve digit alphanumeric digital address to be generated by the following way. Pin code which was already assigned to the village panchayat will be the first six digit of digital address and last six digits to be allocated for village, area and street by attached with door number.

### USE CASE DIAGRAM



This use case diagram defines the process happened over here

- [1] Physical address of the location to be registered by the user.
- [2] Verification of physical address and corresponding digital address to be generated by administrator.
- [3] Real time usage of digital address.

## CONCLUSION

This application helps user for the easy remembrance of addresses. It reduces the writing of whole address instead twelve digits are used. It provides location information with the attachment of pin-code.

## REFERENCE

[1] <https://timesofindia.indiatimes.com/india/now-government-to-start-mapping-your-address-digitally/articleshow/61665312.cms>

[2] <http://www.digitalindia.gov.in/>

[3] <http://www.digitalindia.gov.in/>