

# Aadhaar Thumb: One Platform to all Services

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**Abstract-** As today, technology is playing really an important role in modeling human life by providing various ways to many problems faced by us in real world. So, to accomplish these problems very accurately with efficiency, every branch of study provides ways and such our India's Central Government is doing nowadays. Our Respected Prime Minister Sir is therefore leading a unique way of using this technology which will help rural as well as urban. Like starting Digital India, Startup India etc. acts which will in greater extent calling upon various creative minds forward to solve national level problems. So, in the same regard we here proposed a practical implementation idea of providing all services by one's fingerprint or thumb print. This will include complete database linkage between various governmental services like Electricity Bill Payment, Water Bill Payment, Bank Services etc. just by tapping one's thumb to small fingerprint reader sensor.

This solution will greatly solve government's services to move more steps ahead in factor of speed, time and space. This solution mainly depends upon the biometric data provided by Indian citizens to Aadhaar's Database. And, for that we named it as "Aadhaar Thumb: One Platform to all Services."

**Keywords**— Database, Aadhaar Database, Cloud Gateway, Sensor.

## I. INTRODUCTION

Since in today world, the technology: the problem to every solution is spreading at every corner of world. And, many engineers are dealing with real world problems to achieve solutions to those. Nowadays, Indian Government too is emphasizing on Digital India Movement which is going to great achievement towards digitalization of Nation worldwide. With that, many plans and schemes are out from government's side such as Startup India, Smart India and Make In India etc. and soon on which will be surely taking place in coming future. With that, today government is trying to connect one's thumb print with all services but is still in process due to such large population.

Moving on with this particular idea, we here are proposing an implemented idea which has been made using JAVA SE, Server-Client Tier and Fingerprint Sensor via Arduino UNO. This has been done using normal dummy data which can be applied under small-scale industry or for particular society. This includes much great stuff which will unpack in coming sections. Till now, if this solution is applied to governmental then will surely give fruitful way of handling all services under one database tier and will have none lacks of providing data all over the nation.

## II. DESIGN AND RESEARCH WORK

Talking about the methodology involved in this software. We would like to explain its basic idea and working methodology in just three simple sections. The three different sections are namely:

1. Welcome Screen
2. Login page including finger print sensor.
3. Dashboard (includes various facilities).

### a. Welcome Screen

Now talking about the very first module of our software that is a welcome screen where a new user can take a quick tour of how to use this software quickly so whenever a user come to our welcome screen in the extreme left corner he/she can click on the button states Let's get started like the figure shows.



Fig 1. Depiction of Welcome Screen of Software.

### b. Login Page

When a user will be done with this task then just after that a window of Login will pop out in which user need to login simply by scanning his/her thumb on the finger print sensor now this finger print will automatically be searched in a linked database where each and every detail regarding a candidate is already maintained.

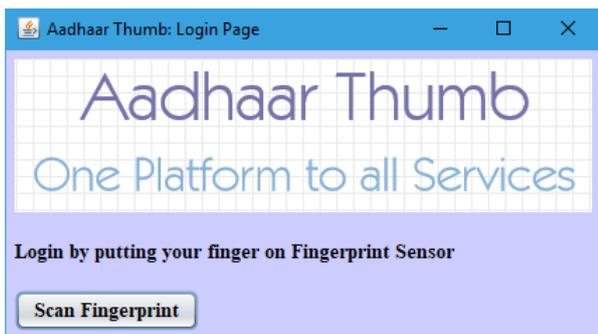


Fig 2. Snapshot of the Login Frame of Aadhaar Thumb.

### c. Dashboard

Just after login successfully third and last module of software will be pop out in which we will redirect to the design menus of various service and can choose any facility any number of time this facility includes facility likes that of

1. Electricity bill payment
2. water bill payment
3. Healthcare center
4. My Digi locker
5. Check bank details
6. apply for scholarship and many more....

Once we done with our desired task we can logout by using the icon Logout me and enjoy.



Fig 3. Snapshot of Main Dashboard Showing Governmental Services.

### III. APPLICATIONS

Listed below are the most important benefits of Aadhaar card and why it is must for every Indian:

#### 3.1 Aadhaar number based Direct Benefit Transfer (LPG Subsidy):

Under this application an individual has unique 12-digit identification number printed on Aadhar card can be used directly as a token to acquired LPG subsidy amount directly in the individuals bank account. This DBTL scheme is named as PAHAL. To get this particular benefit we need to visit our near area's LPG distributor and fill a form to link a person's

Aadhar card number directly to the person s 17-digit unique LPG connection number. So that subsidy amount can directly be credited in an indi-vidual s account. Although now we can also get direct benefit transfer of subsidy by linking our bank account to the LPG number directly.

#### 3.2. Aadhaar as Jan Dhan Yojana:

This is the yojna which is recorded in Guinness world record under the scheme Pra-dhan Mantri Jan Dhan Yojana (PMJDY) which accepts only Aadhaar card/number as the only document required to open a new bank account. Although one can also open PMJDY account after attaching other documents as well. The several benefits offered under this scheme are RuPay card, free zero balance savings account, life, crop and accident insurance and many others including digital payment as well.

#### 3.3. Aadhaar as Passport Registration Card:

This application of this Aadhaar card will provide us the ultimate and prove to be most beneficial feature. According to this if any person has an Aadhaar card, then he/she can get their passport ready in just 10 days. Under this policy of Aadhaar, verification by police will be done at the later stage as falsified to the earlier rule which requiring police verification at earlier stages which seems to be lot of time cumbersome. Also, according to the new government's rule and regulations, if we want to apply for a passport then, Aadhaar number is mandatory.

#### 3.4. Aadhaar as Digital Locker:

Government of India has showcase the digital locker (Digi Locker) system for every-one as one of the application of Aadhaar for storing all their personal document on the government's server along with a secured sign-up process so that no other person can access it, for accessing Digi Locker person required to link his/her unique Aadhaar card number so that a verification can be provided via Aadhaar and one can access all the required document anytime anywhere simply.

#### 3.5. Aadhaar as Voter Card Linker:

Aadhaar is acting as a voter card linker from 9th March 2015 onwards in this process an individual Aadhaar cards UIDAI number would be linked to its voter ID's however the main focus of this action is taken to eliminate the bogus voters. So when an Aadhaar card number is linked, it would become impossible for any voter ID card holder to make it's illegal and falsified use, because while registration during polling demands voter card holder to be physically present and required to produce Aadhaar card at the polling booth for linking process.

#### 3.6. Aadhaar in Monthly Pension:

In this scheme, all the persons who fall under the category of pensioners from selected states will be required to firstly register their unique Aadhaar card number to their concerned departments in order to enjoy the benefit of their monthly pension. This step has been taken up by governments to authenticate the true pensioners as in past times many cases were observed in which there have been fraudulent beneficiaries requesting for a pension were fake and falsified

so to make this system ampler clear and fairer this system has been launched.

### 3.7. Aadhaar in Opening of a New Bank Account:

Now there is no need to assemble heaps of documents for opening a simple account in bank, with the facility of unique Aadhaar card provided by UIDAI one can apply for any account opening in banks just by attaching a copy of Aadhaar card which alone is sufficient to fulfill all demanded proof and it is now acceptable by each and every bank as a valid proof to open bank account. In fact, it can also serve as an address proof as well provided address on Aadhaar is sufficient for opening of the account if it matches with the original address. Apart from this many more benefits and services can be provided using this such as applying for new PAN also need ones unique Aadhaar number.

## IV. RESULTS AND CONCLUSIONS

With the extent of this technology, the different applications studied in contrast this Aadhaar based software can be successfully used in areas of government sector or at industry level usage for passport, applying for PAN card, accessing the facility of Digi locker, doing lots of listed works just with the help of unique 12 digit identification number, which not only provides an ease to end users but also provide a secured platform as well so the time is not far when all other services will turned as Aadhaar based only.

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