E-NOMINATION AND VERIFICATION FOR ELECTION

A PROJECT REPORT

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BONAFIDE CERTIFICATE

Certified that this project report titled **"E-NOMINATION AND VERIFICATION FOR ELECTION"** is the bonafide work of **DEVI S (2014272006)** who carried out project work under my supervision. Certified further that to the best of my knowledge and belief, the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or an award was conferred on an earlier occasion on this or any other candidate.

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ABSTRACT

E-services mostly provided by businesses or non-government organizations(private sector). Effectiveness of e-Government will be determined by the confidence of citizens and businesses in using Information Technology. To increase the understanding of the relationship between local values in public administration and e-government. E-government: e-services provided by government to citizens or business (public sector is the supply side). In government sectors, vehicle registration, passport registration, income tax filing, etc ., are provided through e-services only.we will have to describe aspects that are related to fields which cover the concept of e-Service in the domains of e-government.

This project framework for e-nomination and e-verification for conducting elections in India. This paper provides an outline for nomination and verification procedure using the AADHAR details of Indian citizen. In addition, approval of candidate by the party leader was making it as an optional and approval of election commission is mandatory against nominee's application. This system enables security implicitly by using the finger print recognition which also makes the verification process easier for election commission.

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CHAPTER 1

INTRODUCTION

E-Services:short for an Electronic services.ne-services as: performances whose delivery is mediated by information technology. Such e-service includes the service element of e-tailing, customer support, and service delivery. This definition reflect three main components- service provider, service receiver and the channels of service delivery (i.e., technology). The channel of service delivery is the third requirement of e-service. Internet is the main channel of e-service delivery while other classic channels are also considered.Citizens participate in on-line discussions of political issues with increasing frequency, and young people, who traditionally display minimal interest in government affairs, are drawn to electronic voting procedures.

The term e-service has many applications and can be found in many disciplines. The two dominant application areas of e-services are E-business (or e-commerce): e-services mostly provided by businesses non-government organizations. E-government: e-services provided by government to citizens or business (public sector is the supply side).The e-services are used to provided as helpful for our government developing an e-nomination for election government services will be made available to citizens in a convenient, efficient and transparent manner..

1.1 OBJECTIVES

The main objective of our project is used to develop an e-services for an e-government sectors. Generally In our E-government sectors like passport registration ,vechile registration's. E-governance, government services will be

made available to citizens in a convenient, efficient and transparent manner. so that, we proposed an frame work for E-nomination and verification using an fingerprint recognize. Because it should be secure and identify their nominee person easily. To improve our government services as well as growth our Indian services.

1.2 SCOPE OF THE PROJECT

The scope of the project is to use E-Government sectors.Using an fingerprint recognition, fuzzy logical and AES all for protecting and securely done the election nomination. In this fuzzy logic process is an set of rules are needed to elect the nominee. The AES concept is been handled in this system to get the secure outcome. The main contribution is protect the information produce an good outcome.

1.3 PROBLEM STATEMENT

In this problem system, extended the E-Government services as E-Nomination and Verificationfor election. In previous works e-services only Vechile Registration ,Income Tax filling,Passport Registration,voting system. And also the Where in this system, E-Nomination process as a challenging factor. It should be a good communication as well interface between the Government and public.

1.4 TECHNOLOGIES USED

The technical implementation of providing election nomination and verification in a Indian database deals with Finger print Recognition , Fuzzy Logic, AES Algorithm. These are discussed under this section.

1.4.1 FNGERPRINT RECOGNITION

Fingerprint recognition or fingerprint authentication refers to the automated method of verifying a match between two human fingerprints. Fingerprints are one of many forms of biometrics used to identify individuals and verify their identity. Fingerprint processing has three primary functions: enrollment, searching and verification. Among these functions, enrollment which captures fingerprint image from the sensor plays an important role. A reason is that the way people put their fingerprints on a mirror to scan can affect to the result in the searching and verifying process. Matching algorithms are used to compare previously stored templates of fingerprints against candidate fingerprints for authentication purposes. In order to do this either the original image must be directly compared with the candidate image or certain features must be compared.

1.4.2 FUZZY LOGIC

Human beings make decisions based on rules. Although, we may not be aware of it, all the decisions we make are all based on computer like if-then statements. Rules associate ideas and relate one event to another. Fuzzy machines, which always tend to mimic the behaviour of man, work the same way. However, the decision and the means of choosing that decision are replaced by fuzzy sets and the rules are replaced by fuzzy rules. Fuzzy rules also operate using a series of if-then statements. Fuzzy logic is a more intuitive approach without the far-reaching complexity. Fuzzy logic is flexible. Fuzzy logic can be built on top of the experience of experts. Fuzzy logic can be blended with conventional control techniques. Fuzzy systems don't necessarily replace conventional control methods. Fuzzy logic is based on natural language. The basis for fuzzy logic is the basis for human communication. This observation underpins many of the other statements about fuzzy logic. Because fuzzy logic

is built on the structures of qualitative description used in everyday language, fuzzy logic is easy to use.

1.4.3 CRYPTOGRAPHIC ALGORITHM

Cryptography or cryptology is the practice and study of techniques for secure communication in the presence of third parties. A cipher, or cryptographic algorithm, is the means of altering data from a readable form (also known as plain text) to a protected form (also known as cipher text), and back to the readable form. Changing plain text to cipher text is known as encryption, whereas changing cipher text to plain text is known as decryption.

1.4.3.1 SYMMETRIC KEY CRYPTOGRAPHY

Symmetric-key algorithms are algorithms for cryptography that use the same cryptographic keys for both encryption of plaintext and decryption of ciphertext. This is symmetric encryption and it is comparatively fast compared to other types of encryption such as asymmetric encryption. The most widely-used algorithm used in symmetric key cryptography is AES (Advanced Encryption Standard). It comprises three block ciphers, AES-128, AES-192 and AES-256, each of which is deemed sufficient to protect government classified information up to the SECRET level with TOP SECRET information requiring either 192 or 256 key lengths.

1.4.3.2 ASYMMETRIC CRYPTOGRAPHY

Asymmetric cryptography, also known as public key cryptography, uses public and private keys to encrypt and decrypt data. The keys are simply

large numbers that have been paired together but are not identical (asymmetric). One key in the pair can be shared with everyone; it is called the public key. The other key in the pair is kept secret; it is called the private key. Either of the keys can be used to encrypt a message; the opposite key from the one used to encrypt the message is used for decryption.

1.4.3.3 ADVANTAGES OF SYMMETRIC KEY CRYPTOGRAPHY

Symmetric key crypto-systems have been shown to be more efficient and can handle high rates of data throughput. Keys for symmetric-key crypto-systems are shorter,compared to public key algorithms. Symmetric key ciphers can be composed together to produce a stronger cryptosystem. Security,Software Hardware performance, Suitability in restricted-space environments,Resistance to power analysis and other implementation attack.

1.5 ORGANIZATION OF THE REPORT

Chapter 2: This section highlights the literature survey and the works related to recognize the finger print and nominating for election.
chapter 3: Details the System design and presents the overall system architecture as well as the model description.

1.6 OVERVIEW OF THE PROJECT

The main objective of the project is to growth of e-services and help to improve the e-government sectors, and helpful for an election commission of India.

1.7 TOOLS USED

The tools that were used in the implementation of this project are discussed in this section.

1.7.1 NETBEANS

NetBeans is a software development platform written in Java. The NetBeans Platform allows applications to be developed from a set of modular software components called modules. Applications based on the NetBeans Platform, including the NetBeans integrated development environment (IDE), can be extended by third party developers. The NetBeans IDE is primarily intended for development in Java, but also supports other languages, in particular JSP, PHP, C/C++ and HTML5. NetBeans is cross-platform and runs on Microsoft Windows, Mac OS X, Linux, Solar is and other platforms supporting a compatible JVM.

CHAPTER 2

LITERATURE SURVEY

Ulrica al[1] According to the ulrica research about the study of an E-Government at an local level of government of e-services. The main purpose the research is to improve the e-services at both the local level and national level of government process.If the ulrica improve the Swedish research on e-Services, at the local government level stands for approximately half as many as the projects on the national government level. so,the sweden research at on local government level. There are also projects concerning both national and local levels of government. municipalities express a desire to increase the participation of citizens in order to enrich the development process and the public e-Services developed. Mostly research project may focus on National level.The main task to improve an e-services at an government levels and reach to citizens. And the research also improving their international levels.

R. Zakaria al[2] The research paper addressed the main initiatives projects are made by government to citizens, businesses, governmental employees and other agencies to benefit from e-government. And the Egyptian E-government needed to growth of e-services in several areas.The main challenges of an egyptian e-government as to improve the work environment, and to reduce the government expenditure, to develop their human resources. The Egyptian government process everywhere in their country. The services are the people learn by our-self with the help of e-learning,and the egyptian's cultural also improved. The E-government developed the Egyptian context.

Goran Goldkuhl al[3] This paper is to present an outline of a method for development of public e-services. The public administrators within public

agencies are seen as users of e-services. The main focus of our development process is their Citizens can also communicate to agencies.The communication between citizens and public administrators .E-services are developed to support communication between several parties and it is important that both parties understand each other. A public e-service should be a two-way communication between a public agency and external clients. It is most important for the understandable and user interface between the citizens. E-service is a rather restricted web application.

M.Sirajul Islam et al[4] have described about the stages of e-government and and their general e-services domain. Generally we have an several researchers are working different project done. He described that the E-services on the local level e-governments and National levels. In that, the field of E-Governments are e-security,e-democracy,Interactions. E-services are rapidly growing for an helpful of the government.The E-services main helpful to the e-government and on citizens. E-democracy process main needs to improve the Indian democratic field.

Kazeem Oluwakemi Oseni et al[5] It is important to know that ”e-Government initially began as an intra-governmental communication tool” according to [4] shortly before government organizations developed their websites with useful information for their citizens. If the e-government main challenges to develop their developing an e-services to Nigeria better than the asia process. If the Nigeria main services are to improve the survey of the results.

CHAPTER 3

SYSTEM DESIGN

3.1 ARCHITECTURE DIAGRAM

The Architecture is designed to nominating for election occurring data from a large database. Then using the (AES) algorithm,to protected the sensitive informnation as well data from an unauthorized access mannner.

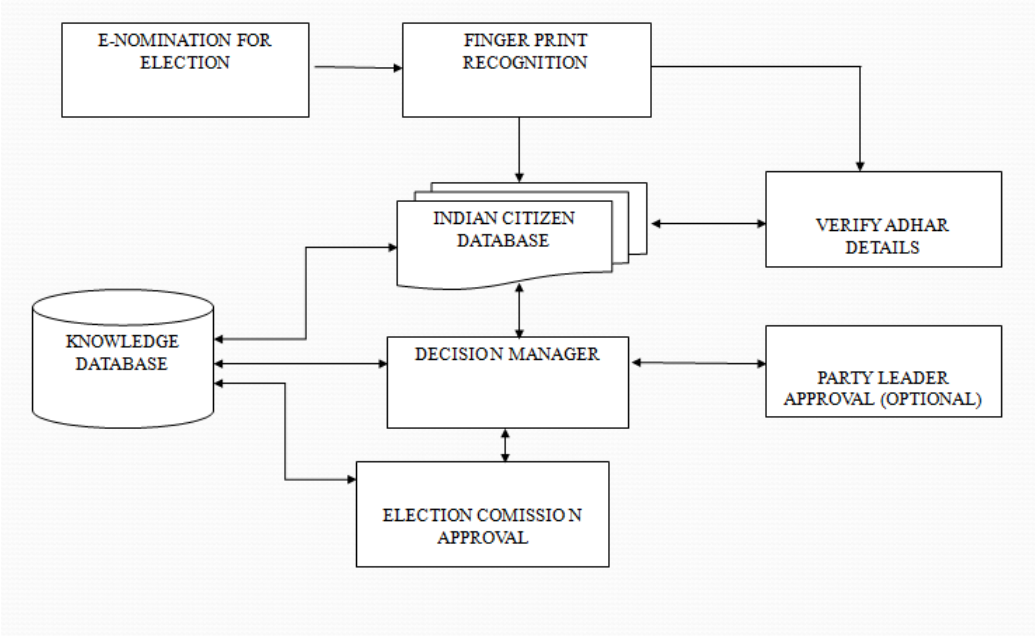

Figure 3.1
Detailed design of E-Nomianiton

3.2 MODULE DESCRIPTION

The module description describes about the Fingerprint Recognition and verify the adhar detials finally apply for E-Nomination and stored the form as usig an AES algorithm and also apply for fuzzy logic of the system mentioned in figure 3.1

3.2.1 Finger Print Recognition

Fingerprint Systems are used to provide a real time recording of an impression of a fingerprint pattern. The user puts his/her finger on the finger sensor machine, and a sensor captures the fingerprint. This is then compared against a stored database, and the information is sent to the produce an Aadhar details about the nominee.Then, the nominee is eligible and apply for election nomination. Fingerprint Recognition main purpose to follow as (ESV).

3.2.2 VERIFYING AADHAR DETAILS

If the finger print are matches,after that the nominee aadhar details are verifying from the ICDB. In that database may produce an nominee personal information. Then the nominee are eligible to fill the nomination form.

3.2.3 AES ALGORITHM

If the user fill their election nomination form and it should be stored in an knowledge database. The form are stored, before that encrypt the form because unauthorized never view the form. The AES algorithm is a novel approach to provide an key generation by using an cipher key and it used to secure the information. In this algorithm is used to generate an key and encrypt the user nomination form to stored in an database. And also, the key strength is very high secure both using their same keys.

3.2.3.1 AES Algorithm Steps

3.3 Party Leader

The party leader may verify and view their only a nomination form. If the nominee from our party member or not. The party leader may be an optional. After the party leader further process done by the decision manager.

3.4 Fuzzy Logic Rules

Decision mananger may verify the details of election process from the knowledge database. And the personal information from the ICDB. The decision manager may approval the nominee with their set of rules and regulations followed. If they implementing the fuzzy rules,

step1 :If Nominee is a citizen of India

then

Eligible for nomination

step 2: If age is greater 25

then

Eligible for Nomination

These are all some of the rules to be followed by their decision manager to approval for nominee. If the rules are satisfied then move on to Election Commissioner Officer.

3.5 Election Commission Approval

The Election commission officer may check and verify of nominee person. If the officer may set an rules and it satisfied . Then, the person to be approval or rejected by the election officer. Finally it should be stored on database.

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