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SMS voting system using 8051 microcontroller

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ABSTRACT: Mobile voting systems are used to vote securely. Previously, voting took place through traditional methods such as voting booths, punch cards, lever voting and optical voting machines, which are now replaced by some electronic media. All this takes more time to vote. The proposed system is developed to select their candidates through a smartphone application. The process consists of three steps: online voter registration via SMS (Short Message Service) concept , voter voting and publication of the results.This provides greater efficiency for voters to vote anytime, anywhere via the Internet. The important aspect of this is to provide more security to the kernel, because every vote counts, and every vote must be kept secret. This prevents voters from using an OTP (one-time password) to vote multiple times each time they log in and log in.

KEYWORDS: Initial Setup of the System; Registered Cell Phone; Ideas about SMS security; Encryption

I.INTRODUCTION

Introduction to SMS Voting Machines India is the largest democracy in the world. The basic right to vote or simply to vote in elections forms the basis of Indian democracy. In India, all previous elections are conducted by voters using ballot papers. This is a time-consuming and error-prone process. This continued until the electoral scene was revolutionized by electronic voting machines.No more ballot papers, ballot boxes, stamps, etc. All of this is contained in a simple box called an electronic voting machine voting unit. Mobile phone-based voting machines can save a lot of printed stationery and carry large amounts of election materials. It is easy to transport, store and maintain. This completely removes the possibility of invalid votes.This reduces voting time, which reduces problems with election preparation, policing, candidate expenses, and more. Easy and accurate counts without any shenanigans in the count center. The goal of our project is to design and develop a voting machine based on a mobile phone. The objective of the project is the implementation of a voice system based on GSM (Global System for Mobile Communications). The system is implemented using an embedded microcontroller.The integrated single-chip computer used here is the AT89S51 single-chip computer. In fact, the goal of this project is to set up an automated voting system. GSM-based voting machines are fully controlled systems. There is no chance of error. The system mainly works using different technologies such as traditional cellular networks like Global System for Mobile communications (GSM) and other radio frequency carriers.Today, banks equipped with mobile phones, cars, ambulances, fleets and police cars are everywhere. Functional units of our project are GSM MODEM, LCD display, PC database and AT89S51.

II.OBJECTIVE

The AT89S51 is a low-power, high-performance 8-bit CMOS microcontroller with 4KB of on-board memory. Programmable flash memory. This device is built using Atmel high-density non-volatile memory. Compatible with 80C51 technical and standard guidelines andpin sets. built-in flash Program memory can be reprogrammed either within the system or through conventional non-volatile memory. Combining a versatile 8-bit CPU with in-system programmable flash memory in a monolithic programmer chip The Atmel AT89S51 is a powerful microcontroller that provides a highly flexible and cost-effective solution. Many built-in management apps.

III. LITERATURE REVIEW

In today's world of growing advanced mobile technologies, the traditional voting method can be changed to a newer and more effective approach termed mobile voting. The Mobile voting system provides a convenient, easy, and

efficient way to vote to eliminate the shortcomings of the traditional approach. In this paper, we propose to build an E-Voting system which is basically an online voting system through which people can cast their vote through their smartphones or by using an e-voting website. To achieve the required security we are using OTP (one-time password) approach, which is most commonly on the web to tell the difference between a human using a web service and an automated bot thus making the website more secure against spambot attacks. If the results of the matching algorithm are a three-point match then checks whether this person owns a voter ID after that it will check with AADHAAR ID, If he has the right to vote then a voting form is presented to him, and the third level of authentication is carried out by using One Time Password (OTP) principle. Today, technology is increasingly being used as a tool to help voters cast their ballot. To ensure the exercise of this right, virtually all voting systems around the world include steps for identifying and authenticating voters, voting and registering to vote, counting votes, and publishing election results.

Hardware requriments;

- 8051 Microcontroller
- SIM 800 GSM Module
- Crystal Oscillator
- Resistors
- Capacitors
- Transistors
- Cables and Connectors
- Diodes
- PCB and Breadboards
- LED
- Transformer/Adapter
- Push Buttons
- Switch
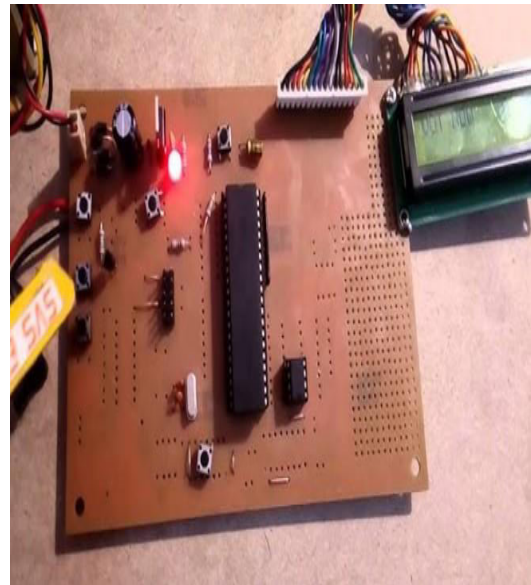- IC
- IC Sockets

Iv. MODEL
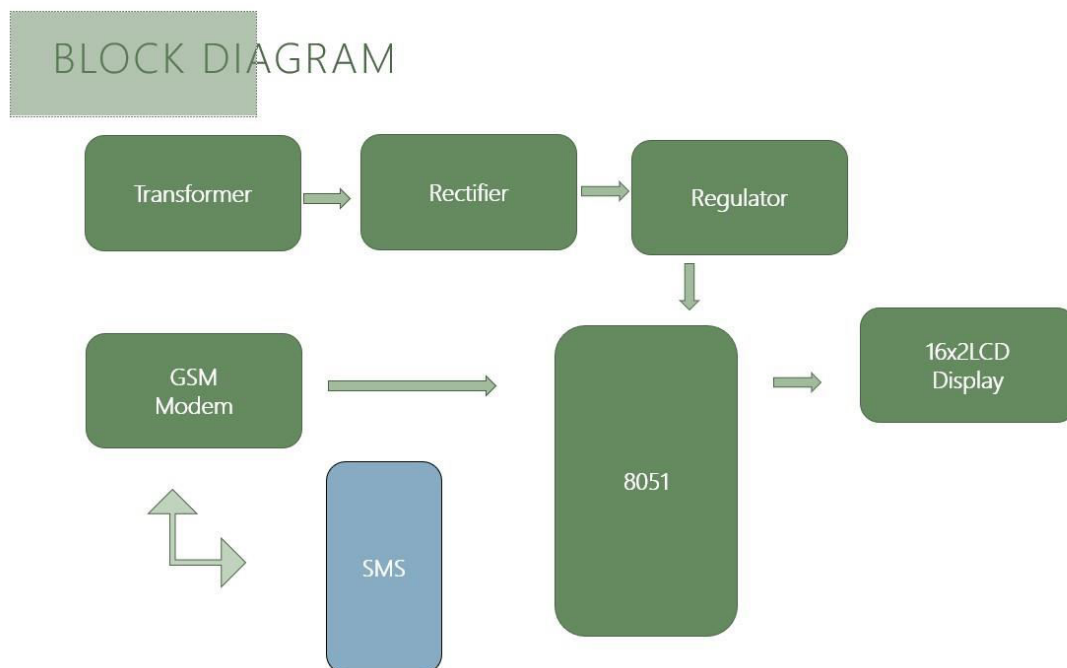
v. MODEL

1. on mobile   2.hardware

VI. CONCLUSION & FUTURE SCOPE

By referring to this paper security performance is improved, avoiding security tensions and also avoiding the queue the voting time at the polling booth. Voters can cast their votes easily from any place at a given time. It can save the time of the voter and avoid the forgery of votes. Authentication is always a difficult requirement to fulfill for remote voting schemes, most of which apply a public Computer Science &Information Technology (CS & IT) 303 key-based signaturescheme for voter authentication. In our scheme, by using the existing GSM authentication infrastructure, the public-keyoverhead is largely reduced. Our scheme also enhances security and provides more mobility and convenience tovoters. In this paper, we presented the basic structure and protocol of our GSM-based mobile voting system.

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