

PROJECT PROPOSAL

Project Name

Online Voting System

Introduction and Background:

The Online Voting System seeks to modernize the electoral process by utilizing Aadhaar based authentication to ensure both security and efficiency in voting. This system is designed to offer an accessible and intuitive platform, enabling voters to cast their ballots remotely while upholding the principles of security, transparency, and accuracy. The project aims to employ Aadhaar authentication using one-time passwords (OTP) to safeguard against fraud and unauthorized voting.

Conventional voting systems frequently encounter issues such as electoral fraud, extended waiting times, and logistical challenges. The integration of Aadhaar-based authentication will strengthen security measures and eliminate the possibility of multiple voting. The integrity and confidentiality of votes will be safeguarded through the application of blockchain technology and encryption mechanisms.

Project Team Members:

1. Akshaykumar Manojkumar Jaiswal (PRN No: 2022017001368686)
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Internal Guide:

- Manasvi Manojkumar Sawant

Project Objectives:

- Develop a secure online voting system with Aadhaar-based authentication.
- Prevent voter fraud and ensure a transparent electoral process.
- Enable real-time vote counting and result generation.
- Provide accessibility for remote voting.

- Ensure data privacy and encryption for secure transactions.

Features:

- **User Authentication:** Aadhaar-based OTP .
- **Voter Registration:** Secure registration with Aadhaar validation.
- **Secure Voting System:** One-time voting with encryption.
- **Live Vote Counting:** Real-time results without manipulation.
- **Blockchain Integration:** Ensuring vote immutability and transparency.
- **Admin Panel:** Election management, candidate addition, and result monitoring.

Technical Specifications:

- **Front End:** HTML5, CSS3, JavaScript ECMAScript 2024/Bootstrap 5.3.3
- **Back End:** Python 3.13/Java 23/PHP 8.4
- **Database:** MySQL 8.0.42
- **Authentication:** Dummy database of Aadhaar API for verification
- **Security:** HTTPS protocol, SSL certificate
- **Hosting:** Xampp Server 8.2.12 or Local Server

Hardware Requirements

- Memory – Minimum 8 GB and above
- Hard Disk – Minimum 128 GB SSD or HDD
- Processor – Minimum i3 and above

Software Requirements

- Programming Language: HTML 5, CSS 3, JavaScript ECMAScript 2023, Python 3.13 /Java 23
- Operating System: Windows 10 22H2 and above

- Database: MySQL 8.0.42
- Software: VS Code 1.97

Hosting Software:

- XAMPP 8.2.12 Server

Tentative Schedule

Start Date: 03/02/2025

End Date: 30/04/2025

Project Timeline

Phase	Start Date	End Date
Requirement Gathering & Analysis	03/02/2025	10/02/2025
System Design	11/02/2025	20/02/2025
Implementation & Coding	21/02/2025	25/03/2025
Testing	01/04/2025	04/04/2025
Documentation	05/04/2025	09/04/2025
Submission of the project	10/04/2025	15/04/2025

References

- <https://vote.gov/>

(Ms. Rohini Chandrakant Kulkarni)
Sawant)

Signature of the Study Centre Head

(Ms. Manasvi Manojkumar

Signature of the Internal Guide

(Stamp of the Study Centre)