Project Name: BD Online Voting System

Introduction

The Online Voting System is a web-based application designed to provide a secure, transparent, and efficient way of conducting elections. Instead of using traditional paper ballots, voters can log in, cast their votes, and view results through a digital platform.
This project has been developed specifically for a Bangladesh-based context, where both Bangla and English language options are available to make it user-friendly for all types of users.

Objectives

The main objectives of this project are:

1. To digitalize the election process and reduce human errors.
2. To allow voters to vote securely from anywhere through a web platform.
3. To ensure that each voter can only vote once per election.
4. To provide administrators with tools to create elections, add candidates, and view results.

Scope of the Project

The system supports **Admin Panel** and **Voter Panel**.

Elections can be created and candidates can be added by the administrator.

Voters can register, log in, and vote in active elections.

Results are generated automatically in real-time.

The system ensures secure login with sessions and hashed passwords.

Features

Admin Features

Admin Login & Logout

Create new elections

Add candidates under specific elections

Manage voters

View election results (live updates)

Voter Features

Voter registration

Voter login & logout

View active elections

Cast vote (only once per election)

View results after the election

Tools and Technologies

Frontend: HTML5, CSS3, Bootstrap

Backend: PHP (Core PHP)

Database: MySQL (phpMyAdmin)

Server: XAMPP (Apache + MySQL)

Languages Supported: Bangla & English

Database Design

The database used is bd_voting, consisting of the following tables:

admins – Stores administrator login information

voters – Stores voter details (name, email, password, etc.)

elections – Stores election details (title, start date, end date)

candidates – Stores candidate details linked to elections

votes – Stores votes cast by voters

System Architecture

User Side (Voters):
Register → Login → View Elections → Cast Vote → View Results

Admin Side:
Login → Dashboard → Create Election → Add Candidates → Manage Voters →
View Results

Implementation

Installation: Place project files in htdocs (XAMPP) and import bd_voting.sql in
phpMyAdmin.

Execution: Open http://localhost/bd_voting_system/.

Login: Admin logs in using predefined credentials, voters register themselves.

Voting: Voter selects an active election and votes once.

Results: Admin and voters can see results after voting is complete.

Advantages

Time saving and cost effective compared to paper-based voting.

Easy accessibility for voters (Bangla + English).

Transparency in the result process.

Reduces human errors and fake votes.

Limitations

Requires stable internet connection.

Limited to small and medium-scale elections (not national-level secure).

No biometric verification included in this version.

Future Enhancements

Biometric or OTP-based voter verification.

Mobile app integration.

Cloud-based deployment for large-scale elections.

Real-time graphical result charts.

Conclusion

The Online Voting System developed in this project provides a secure, efficient, and user-friendly platform for conducting elections digitally. By supporting both

Bangla and English, it ensures inclusivity for Bangladeshi users. This project can serve as a foundation for larger e-governance systems in the future.