

CS382L-Visual Programming Lab

Project Report



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Online Voting System

Introduction :

In today's world of tech progress, the Online Voting System is a big change in how we vote. It uses the internet to make voting easy and safe for people.

This system wants to make elections better by giving us a simple, open, and safe online place to vote from anywhere. It has strong security to make sure our votes are counted right and to stop any cheating.

The goal is to get more people to vote by making it simple and letting everyone take part, no matter where they are. With a focus on keeping our information private and a smart design, the Easy Online Voting System is making democracy better and using new technology to do it.

User :

The User Class is like your digital ID in our app. It keeps your username and password safe. When you first use the app, it helps you create a digital ID by choosing a username and a password. Think of it like getting a membership card for the app.

When you sign up, the User Class makes sure to add your information to the app's list of members. This way, the app recognizes you and lets you do things like vote. It's like the key to entering the app and being part of all the cool things it offers.

Candidate :

In our election app, the Candidate Class is where we keep track of people who want to be elected. Each person running has a name, and this class helps organize and show a list of all the candidates. It's like having a directory of everyone who wants your vote.

The Candidate Class makes it easy for the app to manage and display information about each candidate. This makes it simpler for you to understand who the candidates are and what they stand for. It's like having a cheat sheet for the election.

Election :

The Election Class is like the manager of the election. It oversees and presents all the candidates running for office. Think of it as the master organizer that keeps everything in order. By keeping a detailed list of each candidate, the Election Class ensures that you get a clear and organized view of your options.

This class is the backbone of the app, making sure everything runs smoothly. It helps create dynamic displays so that you always have up-to-date information. The Election Class is like the behind-the-scenes hero that makes your experience in the app seamless and enjoyable.

Main Method:

The Main Method is like the control center of the app. It's where everything begins. Imagine it as the guide that shows you different options based on what you want to do. You can sign up, log in, check out the candidates, and vote – all within this interactive hub.

This method keeps things interesting by running in a loop, making sure you always have options available. It's like the main menu that sets the tone for your journey in the app. By managing the flow of operations, the Main Method ensures a smooth and easy platform for you to engage with the election features.

Register Method:

The Register Method is how you join the app. It's a simple and user-friendly process where you pick a username and a password. After that, you're officially part of the app's community. It's like getting your ticket to join the digital election party.

After successfully signing up, the Register Method plays a crucial role in welcoming new members. It adds diversity to the digital electorate, making sure everyone gets a chance to be part of the democratic experience. This method is not just a technical step; it's a friendly handshake inviting you into the app.

Login Method:

The Login Method is like the app's security guard. It checks if you are who you say you are by verifying your username and password. Once you're in, the app recognizes you and lets you access more features. It's like unlocking a door that leads you to a personalized and secure space within the app.

Rooted in strong security measures, the Login Method ensures that your account stays safe. It prevents unauthorized access, keeping your personal information confidential. By being a trustworthy gatekeeper, the Login Method builds a foundation of trust and security in the app.

View Candidates Method:

The View Candidates Method is your guide to understanding who's running for office. It's like a visual display that compiles and presents a detailed list of candidates. Each candidate's name is shown with a number, making it easy for you to pick your favorites.

This method is like a virtual tour of the candidates, helping you make informed decisions during the voting process. It acts as a bridge, connecting you to the diverse array of candidates and promoting transparency. The View Candidates Method ensures you have a clear and structured overview, empowering you to be an engaged and thoughtful voter.

Vote Method:

The Vote Method is the highlight for users who are logged in. It's the feature that lets you actively participate in shaping the election outcome. When you're logged in, you can choose a candidate by their corresponding number and cast your vote. The app ensures you only vote once and keeps track of everyone's choices.

This method is more than just a technical process; it represents your democratic participation in the app. It's your chance to express your preferences and contribute to deciding the election results. By updating the candidate's vote count, the Vote Method turns your choices into meaningful and transparent outcomes, reinforcing the democratic spirit at the heart of the app. It's all about your voice and the power of individual expression in the digital democratic framework.

Database usage in Online Voting system

User Information:

Think of the database as a smart and organized storage space, like a digital filing cabinet. It keeps track of details about users, much like having a personal drawer in this virtual cabinet with your name on it. When you sign up for the app, your chosen username and password are noted down in this digital space. So, every time you log in, the app checks with this database to make sure it's really you.

Candidate Details:

For those running in the election, the database has a special section dedicated to keeping track of their names. It's like having separate files for each candidate. When you use the app to look at the candidates, it's as if you're opening a file in the database that contains information about each person running for office.

Election Management:

The database is like the brain behind the scenes, playing a crucial role in managing the entire election process. It keeps a record of all the candidates, their details, and even the votes cast by users. So, when you see the list of candidates, just know that it's information coming from this database, ensuring everything is well-organized and up-to-date.

User Interaction:

Whenever you register, log in, check out candidates, or cast your vote, the app talks to the database to make these actions happen. It's like the app is asking the database for information and instructions. For instance, when you register, the app tells the database to create a new entry for you. When you log in, it checks with the database to see if your username and password match.

Security Measures:

Picture the database as a super-secure vault. It stores your information in a way that keeps it safe from unauthorized access. Only the right people (users) can access their own information and participate in the election activities. So, it's like having a reliable security guard for all your digital details.

Dynamic Updates:

As the election progresses, the database updates itself to reflect the latest changes. When users cast their votes, the database keeps track of the counts for each candidate. This ensures that the app always shows the most recent results, similar to updating a scoreboard during a sports game.

Overall Efficiency:

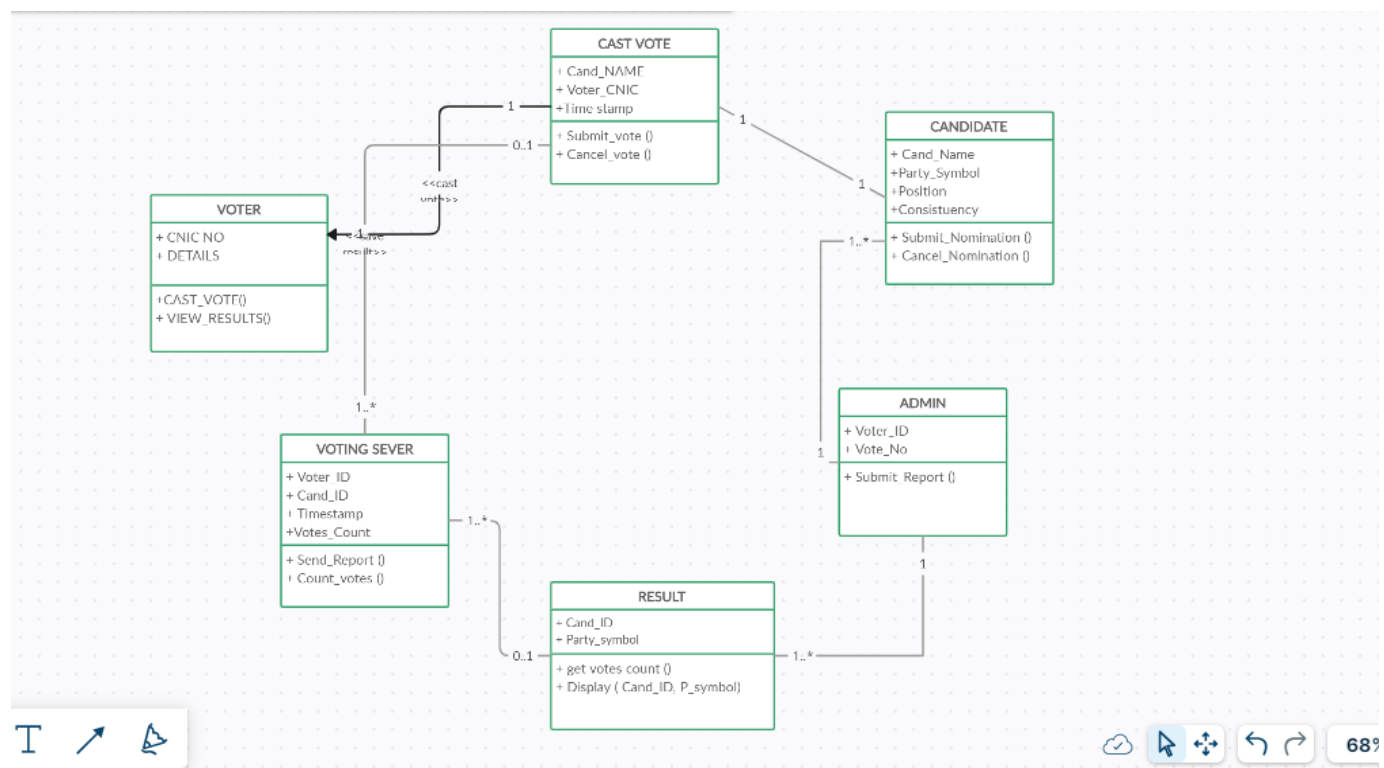
In simple terms, the database is like the powerhouse that makes our election app work smoothly. It efficiently manages and organizes information, allowing users to interact with the app without any problems. It's like the backbone supporting the entire system, making sure everything runs seamlessly and provides a smooth experience for everyone involved.

So, the next time you use the app to check candidates or cast your vote, just remember that the database is working behind the scenes, making it all happen. It's like the digital assistant that keeps our election process running smoothly and ensures that your experience is secure and up-to-date.

Conclusion :

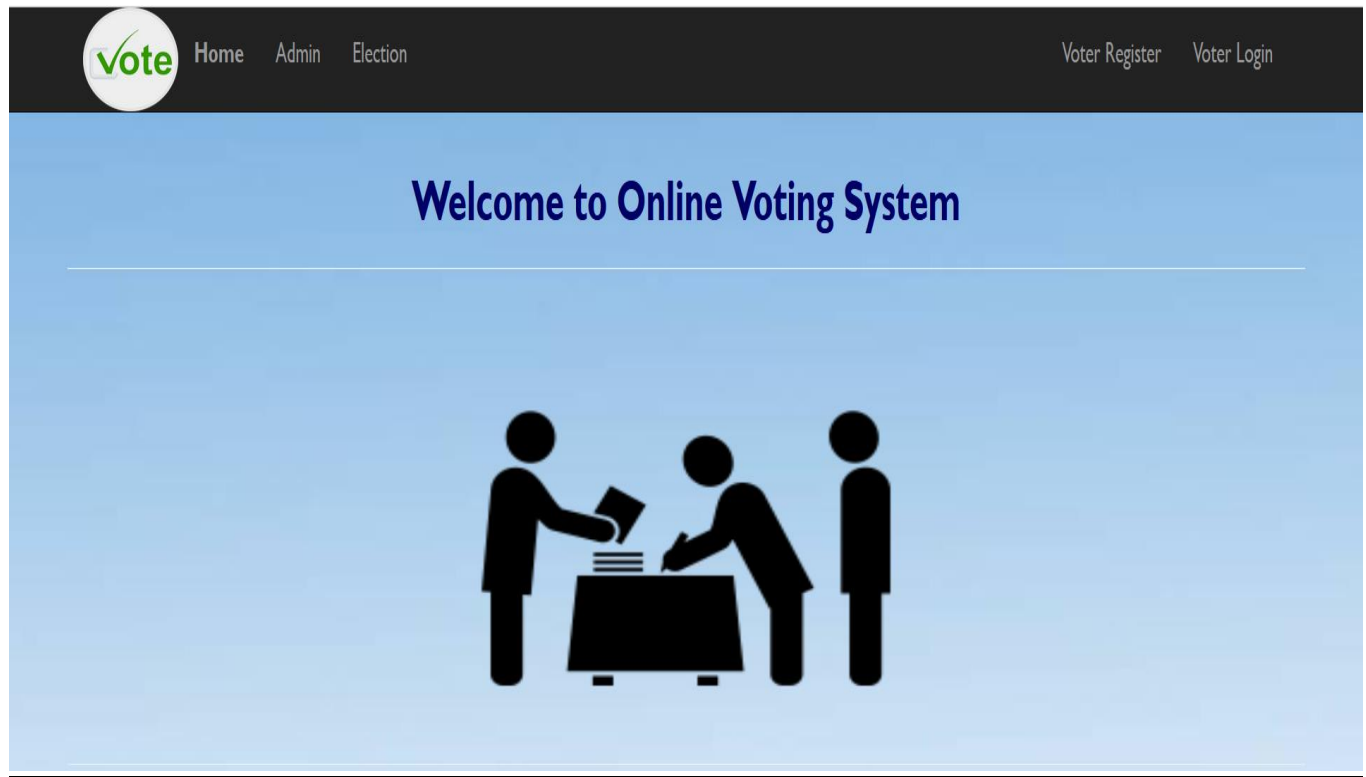
online voting makes it easier for people to vote using the internet. It's convenient, letting you cast your vote from home. However, we need to be careful because there are worries about keeping it safe from hackers. Security is super important to make sure votes are real and not changed. While online voting can be helpful, we must be sure it's trustworthy and fair. People have to trust it to work well. Making sure everything is clear and open helps everyone feel good about the process. We're still figuring out the best way to use technology for voting, but it's important to keep improving to make sure everyone's voice is heard accurately and without any problems.

Class Diagram :



Project Working Snippets

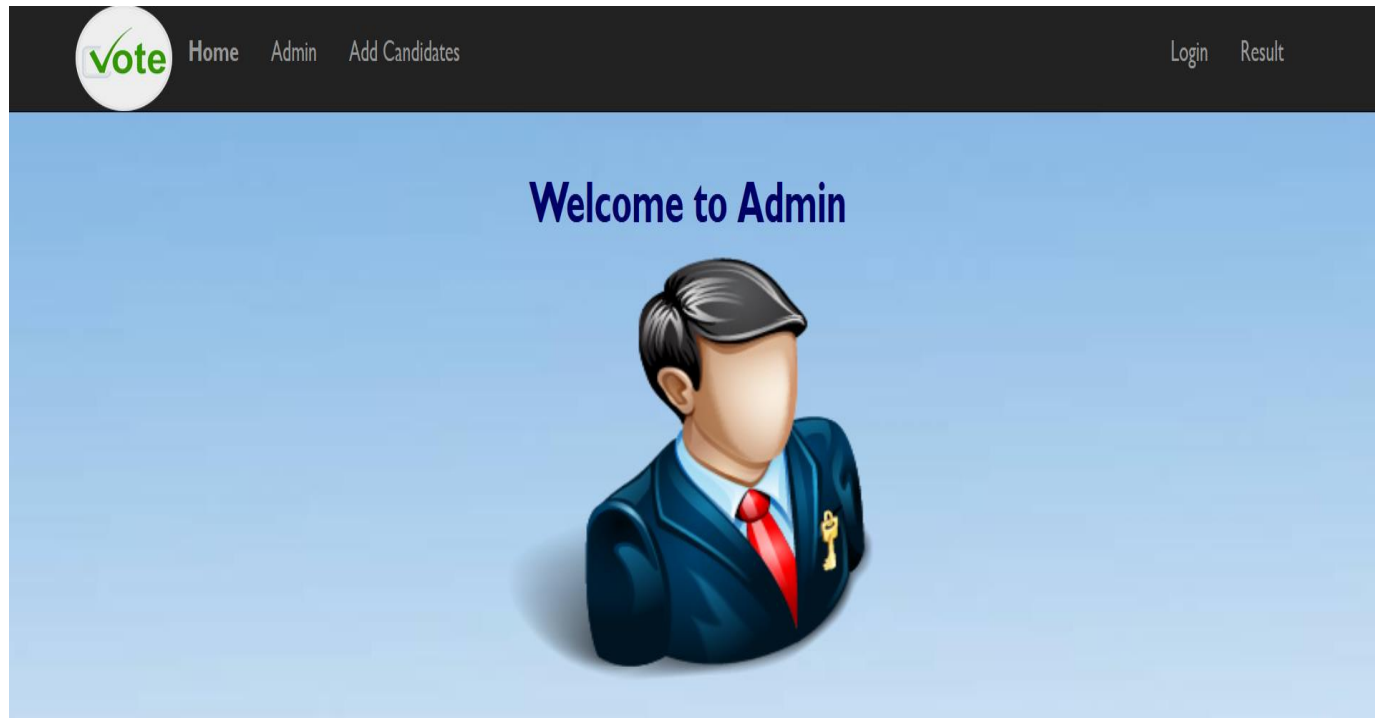
Home Page :



Admin Login:

The screenshot shows the admin login page. The top navigation bar is dark gray and contains the same "vote" logo as the home page. To the right of the logo are links for "Home" and "Admin Panel". Further right, in the same bar, is a link for "Login". The main content area has a light blue background. At the top of this area, the text "Admin Login" is displayed in a dark gray, serif font. Below this text is a login form. The form consists of two input fields: one labeled "Email" and another labeled "Password". Below these fields is a checkbox labeled "Remember me?". At the bottom of the form is a button labeled "Log in".

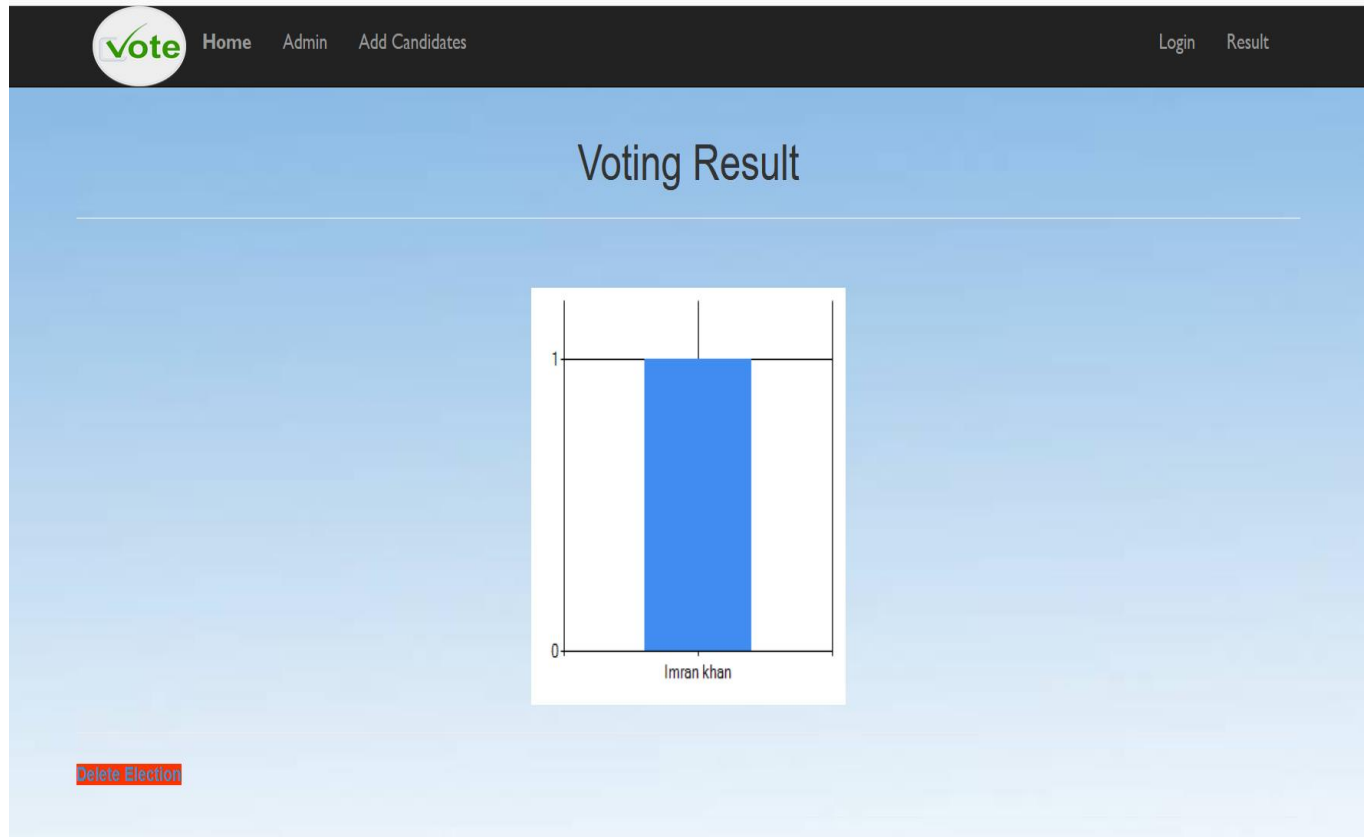
Admin Home Page :



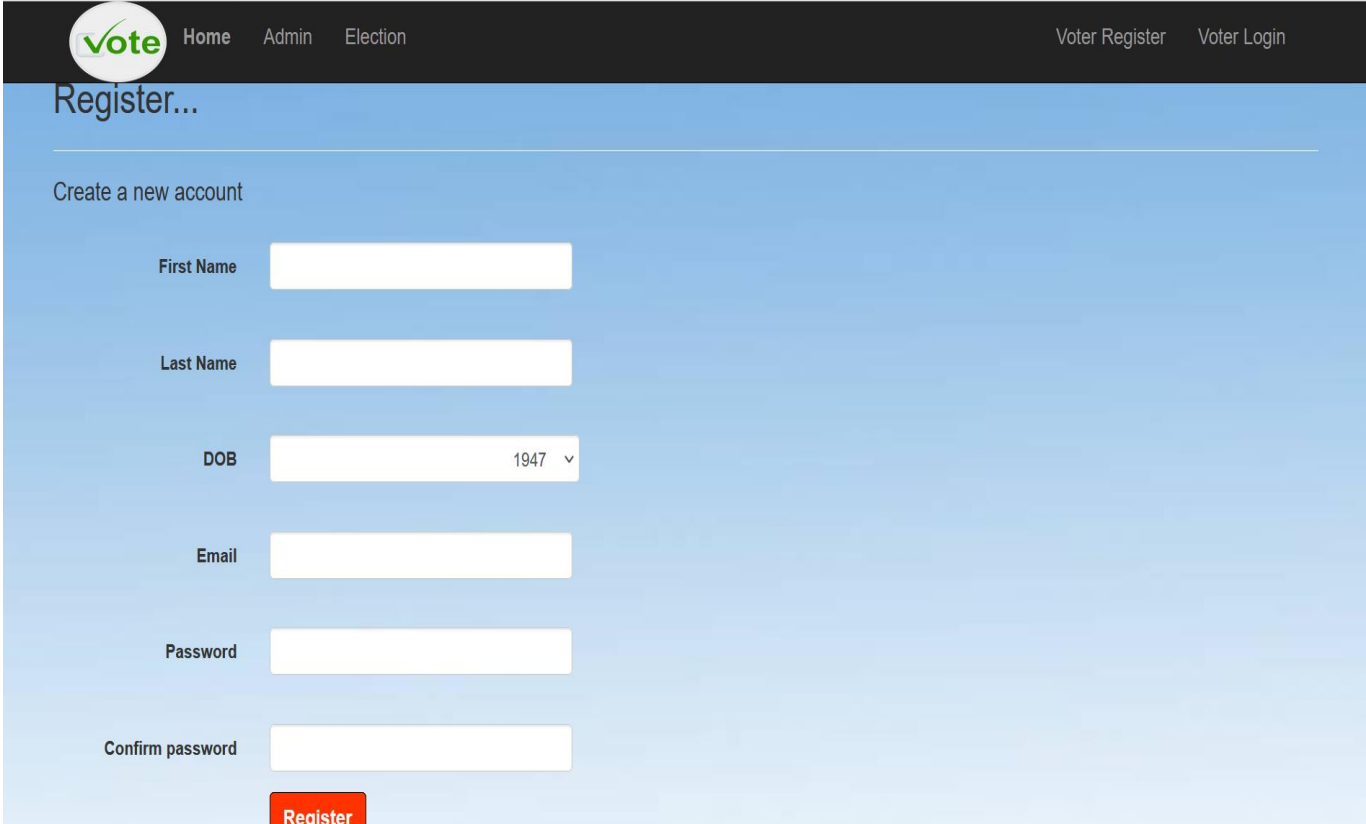
Register Candidate :

A screenshot of the 'Register Candidate' form. The top navigation bar is identical to the previous page. Below the navigation bar, the text 'WELCOME:: admin@gmail.com' is displayed in red. In the top right corner, there is a 'Logout' button. The main heading is 'Candidate Registration'. The form consists of several input fields: 'First Name', 'Last Name', 'DOB' (with a date format 'dd / mm / yyyy' and a calendar icon), 'Email', and 'Position'. At the bottom center of the form is a red 'Add' button.

Admin View Results :



Register New Voter :



The screenshot shows the 'Register New Voter' page. At the top, there is a navigation bar with a 'vote' logo and links for 'Home', 'Admin', and 'Election'. On the right side of the bar are links for 'Voter Register' and 'Voter Login'. The main heading is 'Register...'. Below it is a form titled 'Create a new account'. The form contains the following fields:

- First Name:
- Last Name:
- DOB: (with a dropdown arrow)
- Email:
- Password:
- Confirm password:

A red button labeled 'Register' is located at the bottom right of the form.

Assign Voter ID :


 localhost:14579

VoterId = 93086 Password = 1234567 Voter Registered successfully.

☐ Don't allow localhost:14579 to prompt you again

OK

User Login :

 [Home](#) [Admin](#) [Election](#) [Voter Register](#) [Voter Login](#)

User Login

Voter ID


Password

☐ Remember me?

Log In

[Register as a new user](#)

Cast Vote :

 [Home](#) [Admin](#) [Election](#) [Voter Register](#) [Voter Login](#)

WELLCOME USER:: 93086

logout

Select Candidate Position

PM

☒ Imran khan

☐ Nawaz sharif

Vote