Online Voting System in Nigeria

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DECLARATION OF AUTHORSHIP

This is to certify that the work presented in this report is the outcome of the analysis and experiments carried out by Adamu Ibrahim (180041158), Abdulsalam Bello (180041247), Idris Musa (180041248), under the supervision of   Dr.Md. Azam Hossain Asst. Professor, Department of Computer Science and Engineering, Islamic University of Technology (IUT), Dhaka, Bangladesh. It is also declared that neither of this report nor any part of this report has been submitted anywhere else for any degree or diploma. Information derived from the published or unpublished work of others has been acknowledged in the text and a list of references is given.

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ABSTRACT

The "Online Voting Software" initiative seeks to simplify voting in Nigeria. Currently, ballots are cast on paper, and because the counting is done by hand, it takes a long time. Votes that are not trustworthy might be cast. All of these make elections challenging. Participants in the proposed system can vote from any location in the world, and ballots are cast and tallied using computers. It saves time, avoids counting errors, and assures that no votes are cast in error. It makes the electoral process easier.

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CHAPTER ONE
INTRODUCTION

1.1 Statement of the Problem

Voting could be a painful method particularly in shrewd votes and recognizing the voted candidate and summing votes to work out the winner.

In different Tertiary establishment it had been therefore evident sadly that the turnover of those aforesaid elections had turned to be slow and wearisome. it had been slow thanks to the subsequent scenarios:

1.As of now, the vote accustomed be dole out as follows- the ballot papers would be issued to any or all the voters, the voters would fill in their chosen nominees, the vote would be command wherever the voters born their ballot into a box. Then, the box would be opened, and also the ballots would be counted by hand. There was a great deal of margin for error.

2.The Election is finished manually, therefore the electioneering is overwhelming a giant quantity of your time, really in most of the elections the electioneering of votes took a protracted hours and longer consume.

3.Miscount of votes that will cause for below vote or otherwise over vote.

4.Ally and misstated vote for a candidate.

As a voters during this faculty, there's a decision and a necessity for reformation and revitalization of the prevailing ancient and manual legal system. The implementation of the web legal system is that the account this chaos.

It is arduous and wearisome on the a part of the election facilitators as a result of it wants a great deal of energy and time to beat the complexness of the preparations and also the holding of the election all the way down to the electioneering of votes.Therefore with these issues the decision for a amendment is taken into account.

1.2 Aim and Objectives of this project

The aim of this project, is to simplify process of casting, counting and announcing the result of voting.

1.3 The objectives are

1. To develop a system software that will help lower overhead of Voting Process
2. To develop cost-effective system of voting
3. To improve the efficiency in voting
4. To increase accuracy

1.4 Justification of the Study

The new or the balloting method is insulation behind as a results of a manual system. There's got to prove the balloting process speed for foster address of the institute voter's union on-line balloting could be a term encompassing many differing types of balloting, hold each election means that of casting a vote and electronic means that of reckoning votes. Since our faculty does not have this, a planned system will be terribly helpful and useful. With assurance of that, this machine-controlled system be terribly handy in obtaining votes, and reckoning them accurately and quick.

1.5 Scope and Limitations of the Study

The system is designed as an internet-based program. The system requires the hosting of a website, which citizens must be required to visit using their computers or cellphones and log in using their credentials to verify and assess the selection process. Its goals are to learn more about alternative tertiary institutions' current selection processes and to ensure that the public's vote is counted when choosing candidates for elective posts. This might also result in Less labor-intensive since the focus is on creating, maintaining, and operating a secure online selection gateway increasing number of voters as more individuals discover how quick and easy it is to vote

CHAPTER TWO
LITERATURE REVIEW
2.1 General Overview

Voting theory formally began within the eighteenth century and ever since, several proposal has been created towards exploitation of electronic technologies to enhance elections (Sobia, Ummer, Ayesha, Usman, and Hassan, 2011). One of the fundamental democratic alternatives is Democracy promotes individual freedom while upholding the rule of law, enabling citizens to express their opinions in the ways they see fit, choose their leaders, and express their opinions on issues without restriction. due to the wide Affirmation of Human Rights within the year 1948 that puts import on compelling circumstance of free elections, countries targeted on AN improved and new choice method that square measure of significance to the election processes within the twenty first century (Salomonsen, 2005).

Election is that the method that allows people to settle on their delegates and specific their fellings on the means they'll be administered [Kohno, Rubin, Stubblefield & Wallach, 2003], [Malkawi, Khasawneh & Al-Jarrah, 2009]and [Ashok & Ummal, 2011].

Nigerian election method has been done manually (voting for native and general elections done by electors with ballot papers and ballot boxes during which the papers square measure placed) since came back to democratic rule the year 1999, the manual choice method was related to tons of issues and forever resulted to post-election violence [Yekini, Oyeyinka, Oludipe & Lawal, 2012]. In the Federal republic of Federal Republic of Nigeria, legal system is of 2 main classes, Manual legal system [MVS] and Electronic legal system [EVS].

The Manual legal system [MVS] involves presenting eligible national with a listing of contestants on a paper referred to as ballot paper, to mark against their favorite contestants and place the ballot paper during a box referred to as box, this method of choice is employed for legislator and office election processes within the country. Manual legal system has some disadvantages, that embody chance of putting the ballot paper within the wrong box, votes enumeration drawback, loss of your time once there happens to be some objections, paper printing and expenditures in serious trouble personnel, for these reasons, it's necessary to use the new technologies to form the election system quicker, economic and trustable as a result of the trust that each vote are going to be tallied and recorded properly is that the foundation of a real democracy [Ademand & Metin, 2011].

The Electronic legal system [EVS] involves presenting eligible national with a listing of contestants on a laptop, to pick out against their favorite contestants, this method of choice is employed for presidential election within the country. The development of data and communications technologies has provide a totally processed election method whereby enumeration of vote square measure dispensed in real time, that the results square measure mechanically out by the top of elections day [Rubin, 2002].

2.2 Voting

Voting is a way for a group of people, such as a crowd or a group of citizens, to express their preference or a particular point of view, sometimes in the wake of discussions, debates, or election campaigns. Democracies choose which candidates to elect to high office. Residents of the area that an elected official represents are referred to as constituents, and those constituents who cast a vote for the candidate of their choice are referred to as voters. There are a variety of alternative ways for putting together voles. In an extremely democratic society, a government is elected by a vote in an election. This is the most straightforward way for individuals to choose among numerous contenders for authority. Pick is the process used by the people to choose their representatives in their government in a highly representative democracy. Pick is the process through which voters directly make decisions, turn legislation into laws, etc. in an incredibly direct democracy.

A vote can be a formal declaration of a person's choice to support or oppose a motion (such as a proposed resolution), a ballot question, a specific candidate, a group of candidates, or an organization. To prevent voter intimidation and to protect their right to political privacy, voting has returned as the recommended course of action. [2010] J. Scott Armstrong.

2.3 Ballot.

A ballot may be a device accustomed solid votes in associate election, and will be a chunk of paper or a little ball utilized in secret, it had been originally a little ball accustomed record selections created by voters.

Each elector uses one ballot, and ballots aren't shared within the simplest elections, a ballot is also an easy scrap of paper on that every elector writes within the name of a candidate, however Governmental elections use pre-printed ballots to shield the secrecy of the votes. The elector casts his/her ballot in an exceedingly box at a spot.

In British English, this is often sometimes known as a ballot paper. The word ballot is employed for associate election method among a corporation [such as a union holding a ballot of its members]. The word ballot comes from Italian ballotta, which means a little ball utilized in pick or a secret vote taken by ballots in Venice, Italy. Ancient Greek ostraca, fifth century before Christ, Ancient Agora depository in athens, housed within the Stoa of Attalus [Merriam-Webster. Retrieved 20122].

2.4 Voting System.

Ancient Greek bronze secret ballots accustomed solid a juror's vote on a case, third century B.C., Ancient Agora repository in Athens, housed within the Stoa of Attalus In ancient Hellenic Republic, voters used items of broken pottery to scratch within the name of the candidate within the procedures of ostracism.

The first use of paper ballots to conduct AN election seems to own been in Rome in 139 BC.

In Ancient Asian country, around 920AD, in Madras, Palm leaves were used for village assembly elections. The palm leaves with candidate names, are going to be place within a mud pot, for numeration. This was referred to as Kudavolai system [Abahlali baseMjondolo, 2005].

An electoral system primarily consists of a group of strategies and rules for numeration votes or ballots in a very bid to work out the result of elections. Winners is also determined by a plurality, a majority [more than five hundredth of the vote], an unprecedented majority [a proportion of the vote abundant bigger than 50%], or accord.

Additionally, electronic voting, sometimes known as e-voting, is a way of holding elections in which ballots or votes are recorded or gathered electronically. The term "computer network pick" is used to describe a pick or electoral method that will change voters to cast a secure and ballot over an electronic network within a corporation. Electronic voting may encompass a wide variety of picks, including both electronic means of casting a vote [or ballot] and electronic means of counting votes [or ballots] [intranet]. Additionally, there are basically 2 entirely separate voting methods, namely:

1.Distance pick

2.Presence pick

In remote voting, the voter or citizens participate without the physical supervision of electoral commission staff and cast their ballots from a location other than a voting booth, similar to voting while traveling via mail, the internet, or a computer network.

An elector or citizen will cast their vote at a polling location while being physically supervised by the electoral directors [or electoral commission staff]. Examples of presence pick include traditional elections held in polling places or pick using electronic voting machines [C. Molokwu, 2014].

2.5 Candidate

A candidate or politico, is that the prospective recipient of a bequest or honor, or an individual seeking or being thought-about for a few quite position for example:

To be elective to Associate in Nursing workplace, during this case a candidate choice procedure happens to receive membership during a cluster, Nomination {is part|is a component|is Associate in Nursing element} of the method of choosing a candidate for either election to Associate in Nursing workplace by an organization or the bestowing of an honor or award. This person is named a politico, tho' politico typically is employed interchangeably with candidate.

A presumptive politico may be a person or organization believes that the nomination is inevitable or probably. The act of being a candidate during a race for either a celebration nomination or for electoral workplace is named a effort. Presumptive candidate is also wont to describe somebody UN agency is foretold to be a proper candidate. Candidate may be a spinoff of the Latin candidus (shining white). In Ancient Rome, folks running for political workplace would sometimes wear togas chalked and bleached to be bright white at speeches, debates, conventions, and different public functions

2.5.1 Candidate in Elections

In the context of elections for office in a very mimetic partisan democracy, a candidate UN agency has been hand-picked by an organization is generally aforementioned to be the politician of that party. The party's choice (that is, the nomination) is usually accomplished either supported one or additional on-line Etymology wordbook. Retrieved 2022). Primary elections per the foundations of the party and any applicable election laws.

Candidates conjointly could also be delineated as incumbents, if they're already serving within the workplace that they're seeking re-election or challengers, if they're seeking to unseat associate degree incumbent within the context of elections for office in a very direct democracy, a candidate is nominative by any eligible person and if parliamentary procedures are used, the nomination must be seconded, i.e., receive agreement from a person in some non-partisan representative systems, no nominations (or campaigning) turn up the least bit, with voters absolve to opt for anyone at the time of selection with some attainable exceptions like through a minimum age demand within the jurisdiction. In such cases, it's not needed [or even possible]that the members of the voters be at home with all of the eligible persons in their space, such systems could involve indirect elections at larger geographic levels to confirm that some first-hand familiarity among potential collectors will exist at these levels i.e., among the elective delegates [Merriam-Webster. Retrieved 2022].

2.6 Electoral Systems

Different voting systems employ various vote types. A plurality election system does not need the victor to obtain a vote majority or even precisely half of all cast ballots. Once there are two candidates running in an electoral system where there is only one vote per race, the victor would often get just half of the votes. Vote rending, which tends to elect politicians who don't support political theory and tends to produce a two-party system, is one aspect of the influence of one vote per race. An alternative to a single-vote system is approval choice, in which voters choose by pressing a button next to a written list of candidates and referenda or by touching the candidate or referenda box on a touchscreen interface in an extremely infrequent jurisdiction using an electronic Direct Record electoral system [DRE]. When the polls close, the system counts the votes and reports the totals to the election officers. Some DREs include a communication device to transmit vote totals to a central counter. As the voter makes their selection, the DRE creates an electronic ballot keep by within the memory portions of the system. The touchscreen systems of an automated teller machine [ATM] alert users and occasionally display themselves [Smith, Sydney. 1839].

2.7 Voting Equipment.

In recent years, popular equipment that was widely used in many nations could also be split into five types.

1.Voting on paper:Each voter is provided with a ballot and a pen or marker to indicate the candidates they choose to support. Hand-counting votes might take a lot of time and effort, but because paper ballots are simple to produce and can be stored for verification, this approach is still the most popular way to cast a ballot.

2. Lever choice machine: A lever machine is an odd piece of equipment, and each lever has a matching candidate allocated to it. TTo vote for his or her prefered candidate, the voter pulls the lever. Because of this kind of mechanical device's interface is not user-friendly enough, the votes will be counted automatically. It is vital to provide voters with some instruction.

3. Direct recording electronic choice machines, or DREs, include a keyboard, bit screen, or buttons that voters push to cast their ballots. Numerous them were found in voting records, and it takes very little time to look at the votes. However, the accuracy of the opposing DRE's records is questioned since it does not keep good records.

4. Punch card: The voter makes a hole in the blank ballot using an aluminiferous hole-punch. Votes will be automatically counted, but if a voter's perforation is incomplete, the outcome is almost certainly determined lawfully.

5. Optical choice machine: This sort of machine quickly counts the votes after each voter fills in the circle next to their preferred candidate on the blank ballot. This machine chooses the darkest mark on each ballot to represent their vote before computing the final outcome. The optical-scan mistake will occur if the elector fills the entire circle, though.

2.8 Review of related works.

All computer scientists who have worked on or are interested in electronic voting seem to agree that online voting doesn't match the requirements for public elections and that existing voting systems need to be improved.

Although they won't specifically discuss voting at distant polling places, other researchers have included electronic balloting, and their work is still pertinent to any effort to build or execute a remote voting system.

Although Lorrie Cranor admits the problems with all types of voting equipment in (1996), she does not make a clear recommendation on her website for one technology over the others.

Other academics, such as Peter von Neumann in 2007, focus on the magnitude of the problem one encounters when attempting to design and put into place a properly safe election system. They

generally remind the country of Ken Thompson's Turing Award acceptance speech as well as the undeniable truth that we can never trust any code that we didn't create ourselves. As a result, they tend to be quite dubious of producers of proprietary voting equipment who suggest that we should always just trust them.

The generic balloting criteria listed by Neumann (2007) suggest that an electoral system should be so difficult to manipulate and then fail-proof that no commercial system is likely to ever meet the requirements and that creating an appropriate custom system would be both extremely difficult and prohibitively expensive. The results should be produced by a mechanical mechanism on human-legible hardcopy paper so that they may be checked by the elector beforehand and, if required, manually recounted.

According to V. Kalaichelvi and R.M. Chandrasekaran (2005), the use of electronic voting procedures for all election processes can help to lessen the threat of electoral fraud and anomalies. Additionally, they support the idea that electronic voting should provide a high level of freedom, security, safety, and confidence while also establishing the basic requirements for an electronic electoral system that can solve important issues like privacy, authentication, obscurity, and force. Additionally, D. Chaum (2007) advises that electronic voting, strengthened with cryptological algorithms and security procedures, is the most suitable method for conducting elections across the world. Furthermore, according to P. Benjamin Franklin Norris Jr. (2005), fresh technologies should be developed and employed to bring the polls closer to the voters if they aren't going to the polls again. Additionally, he said that these more modern technologies may help users and voters become far more informed about current political issues, eloquent in expressing their own views, and engaged in the voting process.

Voters could receive receipts for their ballots, according to a subject presented by David Chaum in 2007. They might use this receipt to verify without giving any information about how they really voted, individuals must certify that they voted in order to establish if their votes were counted or not. This theme is secured by voters selecting one of two pieces of paper at random and using visual cryptography developed by Naor and Shamir in 2007. In 2007, Mercuri and von Neumann advocate using this strategy in electronic voting systems.

CHAPTER THREE.
PROPOSED METHOD.

Product perspective

The software project is a standalone system and not a part of a larger system. The system is made up of two panels, one running visible directly to the administrator as a backend and the other visible to the end users, in this case the voters, through web pages. The two users of the system, namely the voters and the election authority (EA) interact with the system in different ways. The election authority configures the whole system according to its needs using the web interface, also the voters cast their votes using the web interface provided. These votes are accepted by the system on the server.

Product Functions

On the EA side, the system can be used to create/update/delete the election details (voter, position, candidates etc.). The EA will be able to specify the different attributes it wants for position/candidates of a particular election instance and voters. For example, the EA might be happy with just the roll numbers of each voter. After the election is set up, passwords must be generated and mailed to voters on request.

The system is also able to run separate election instances at the same time.

From the voter's panel, the system is used to help them cast their votes and allow them to view the results, which are automatically generated as they are casting their votes.

User Classes and Characteristics.

The users can be divided into two main classes:

1.The EA: its primary objective is to conduct fair and hassle-free elections. The EA has to be a neutral party and should not have any gain/loss from the election results. The EA invites potential candidates to file their nomination for certain positions depending on certain constraints. They should have adequate experience of using a computer to be able to configure the election properly.

2.The Voters: The voters should possess a fundamental understanding of how to navigate a web browser and web pages. The voters should be aware that they have to keep their user-id and password confidential.

Design/Implementation Constraints

Even though the system enables voters to poll their vote from any terminal connected to the Internet, the voters should initially contact the election administrator's office to register themselves and establish their user-ids. This constraint is imposed to ensure that only the genuine person is allowed to vote in the elections.

Required External Interfaces.

Interfaces for users.

We have given all the use cases that are there for the system to specify the user interface. They are given below:

Use case 0: Welcome screen for the Administrator
Main success scenario:

1.The EA is asked to login using his administrator password.

Notes:

If EA enters wrong user-id or password. He is asked to re-enter the password.

Use case 1: Manage Voters
Main success scenario:

The EA chooses to create a new voter record for the first time ever, the EA is redirected to a new screen where he is required to specify the attributes of the voters that are needed to be stored in the database along with the user-id which is unique key among them.

1.If the system encounter improper attribute format. Signal an error and go back to the same screen without any action.

2.If the entered entity shares the same unique key with an existing entity, but the other attributes differ in their values. The system throws up an error displaying the clashing attributes and asks the EA to reenter the entity.

Modify the voter's information

Main success situation:

1. The framework gives the EA list of voters screen.

2. The EA chooses the voter(s) to modify.

3. The EA either modifies the details or deletes the voter(s).

4. The system asks the EA to confirm the changes. The EA confirms.

5. The system presents the EA with the voter's list screen of step 1.

Note:

If EA cancels without confirming. The system does nothing and takes the EA back to the voter's list screen of step 1.

Use case 2: Manage Positions

Main success scenario:

The EA chooses to create a new position in the system, the EA is redirected to a new screen where he is required to specify the attributes of the position that are needed to be stored in the database along with the position name which is unique key among them.

1. If the system encounter improper attribute format. Signal an error and go back to the same screen without any action.

2. If the entered entity shares the same unique key with an existing entity, but the other attributes differ in their values. The system throws up an error displaying the clashing attributes and asks the EA to reenter the entity.

Modify position information

1. The system presents the EA with the list of all posts.

2. The EA chooses the post it wants to modify.

3. The EA either modifies the details or deletes the post.

4. The system presents the EA with the screen of step 1.

Use case 3: Manage the Candidates
Main success scenario:

When the EA chooses to create a new candidate, the EA is redirected to a new screen where he is required to specify the attributes of the candidate that are needed to be stored in the database along with the user-id which is unique key among them.

1.If the system encounter improper attribute format. Signal an error and go back to the same screen without any action.

2.If the entered entity shares the same unique key with an existing entity, but the other attributes differ in their values. The system throws up an error displaying the clashing attributes and asks the EA to reenter the entity.

Modify Candidate information

1.The system presents the user with the list of candidates

2.The EA chooses the candidate to modify.

3.The EA either modifies the details or deletes the candidate.

4.The system presents the EA with the screen of step 1.

Use case 4: Deletion of the already done election
Main success scenario:

1.The EA backup the result of election instance.

2.The EA chooses to delete the election instance.

3.The system asks the EA to confirm the request.

4.The EA confirms the request.

5.The system deletes all the information about the election instance and is now ready for configuration of a new election instance.

Use case 5: The Voting on the Voter's end

Main success scenario:

1.The voter is asked to login using the user-id and password provided to him earlier.

2.The system presents the voter with successive screens for voting categorize in respect to positions.

3.The voter selects one of the position to cast his vote on.

4.The system presents the voter with the list of candidates on that position.

5.The system presents the voter with the final choices of the candidates and ask for confirmation to cast vote.

i.The voter confirms the choices.

ii.The system registers the choices made by the voter.

Note:

1.If the voter enters wrong user-id or password. He is asked to re-enter the password.

2.If the voter has already voted once. The system does not allow him to vote again.

3.If the voter does not select any candidate for a position and attempts to submit. The system asks him to select one of the candidates.

4.If the voter wishes to reconsider his choices. The system will not allow if he already confirm his choice.

5.In case of system crashes or power failure at any point:

i.The voter has not confirmed. He has to re-login and vote again.

ii.The voter has not confirmed his vote. He need not login again to vote.

Hardware Interfaces

There are no hardware interfaces to this software system. The only interfaces are through a computer system.

Software Interfaces

The poll server runs on http server that is enabled to handle server pages (eg. Apache Tomcat). It uses a relational database to keep track of the polls, which it connects through standard database connectivity interfaces.

Communications Protocols and Interfaces

1.For the purpose of sending the voters their passwords through mail, the system should use the SMTP protocol.

2.The system should also use standard protocols for secure transactions between the Voter and the system through the internet.

Non Functional Requirements.

Performance Requirements.

The software is expected to have reasonably short response time. It should be able to log-in and feed the voter with new pages on request with a response time of the order of a few seconds. The system is expected to serve a maximum of up to 10000 voters at any point of time, each voter being active for about a couple of minutes and requiring about 10 pages (depending on the number of positions to be voted for) in all. This would imply that the system should have the capability for processing about 100 transactions each second.

Safety Requirements.

1.In order to prevent data loss in case of system failure, the result of votes that were polled till then have to be saved in the database, for the system to resume the counting process on reboot.

2.The EA should set up his system time appropriately for the election process to start at the correct time.

3.In case the EA detects any security lapse in the system, he should able to shut down the server and close all connections immediately while preserving the already polled votes.

4.The system should be capable of gracefully recovering from earlier crashes and continuing the voting process.

Security Requirements.

1.The system should provide basic security features like password authentication and encrypted transactions.

2.All the passwords generated and communicated to the users should be stored in the server only in an encrypted form for login management to prevent misuse.

3.Serial attacks should be avoided by maintaining a minimum time gap between successive invalid log-in attempts.

CHAPTER FOUR

SYSTEM IMPLEMENTATION

4.1 Information base Plan

The Web based casting a ballot framework utilizes a data set called eVoting containing these tables as delineated beneath:

1.1.2 Information base Tables

i.Voter table: the table holds records of enrolled electors with their particular favored usernames and passwords. It additionally has the citizen id, elector name and year of enrollment.

Figurce 1: Voter table.

ii. **Candidate table:** the table hold the record of candidate such as; candidate id, candidate name, candidate photo and position a candidate contesting for and session.

Figurce 2: Candidate table.

iii.**Position table:** the table holds record of the available position, it includes position ID which automatically increment, position name and limit of contestants per position.

Figurce 3:Position table.

iv.**Admin table:** the table holds login details of Database Administrator, it includes Admin ID which automatically increment, username and a password for login.

Figurce 4:Admin table.

v.**Vote count table:** That holds records of the candidate, and the voter who casts a vote in favor of the candidate. Its primary key is the id field which is also necessary during vote counting. The database is queried to find out how many voters' casts their votes for a given contestant.

Figurce 5: Vote count table.

vi.**Logging Attempt:** this table hold the number of time a user try to login with wrong credentials, the record is used to count the limit number of logging attempt allowed for user in order to block a brute-force attack.

Figurce 6:.Logging Attempt.

vii.**Rigging Attempt:** the table keep the record of voters who try to vote more than once per position.

Figurce 7: Rigging Attempt.

4.2 Interface Design

The system was developed as an interactive mechanism between the user at the interface and the database using the web-browser. This system enables a user through a web browser to interact with the MYSQL database to enter, edit, view and retrieve such data as per the privileges granted. These activities were achieved using Java servlets. HTML forms offer the best layout to enter data, change and view the database. These forms/pages were also kept as short and simple as possible for easy public awareness on the use of the system, some of the forms and report interfaces created include the following:

i.**Home Page:** this is the first page a user will interact with when he visit the system.
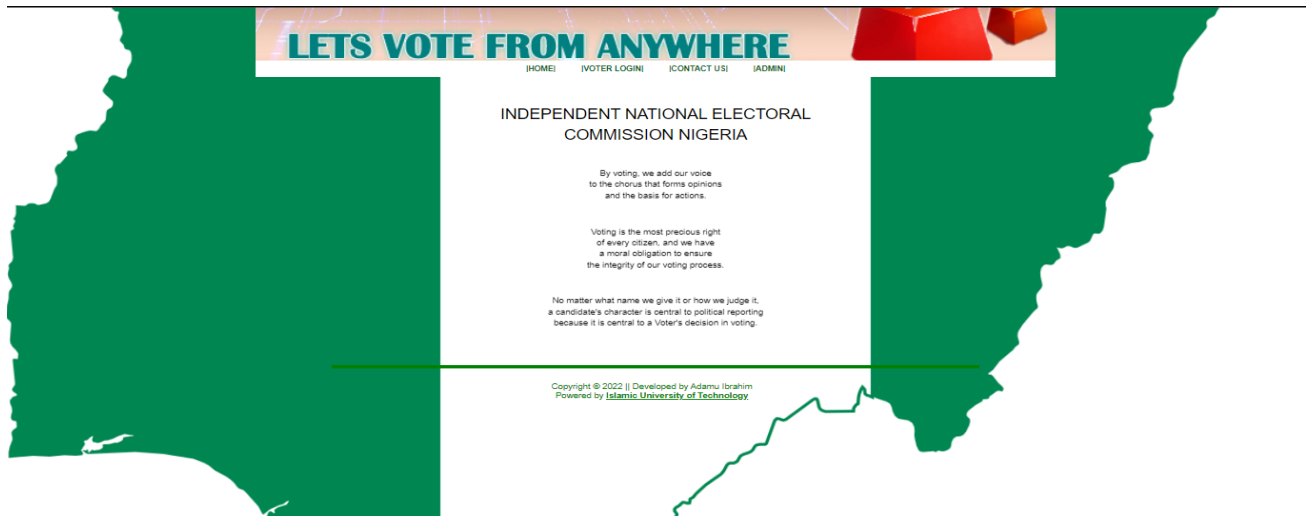
Figurce 8:Home page.

ii.Login page for vote: When a user clicks on voting button, this page appears to him, to bypass this page, a user need login details which is his own school id and password given to him by admin to log in and cast his vote.
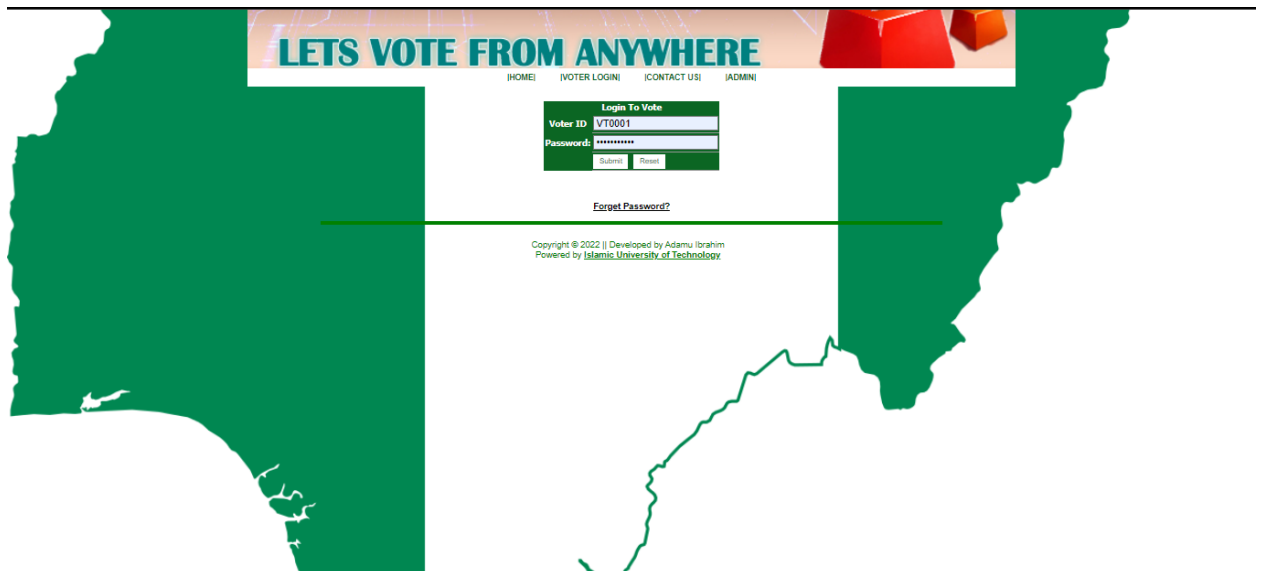
Figurce 9:Login page for vote.

iii.Voting Category Page: After a user bypass login to vote page. he will be redirected at this page, which is voting category, it contain all the registered position on the system, a user 'need to select which position he want vote on and click.
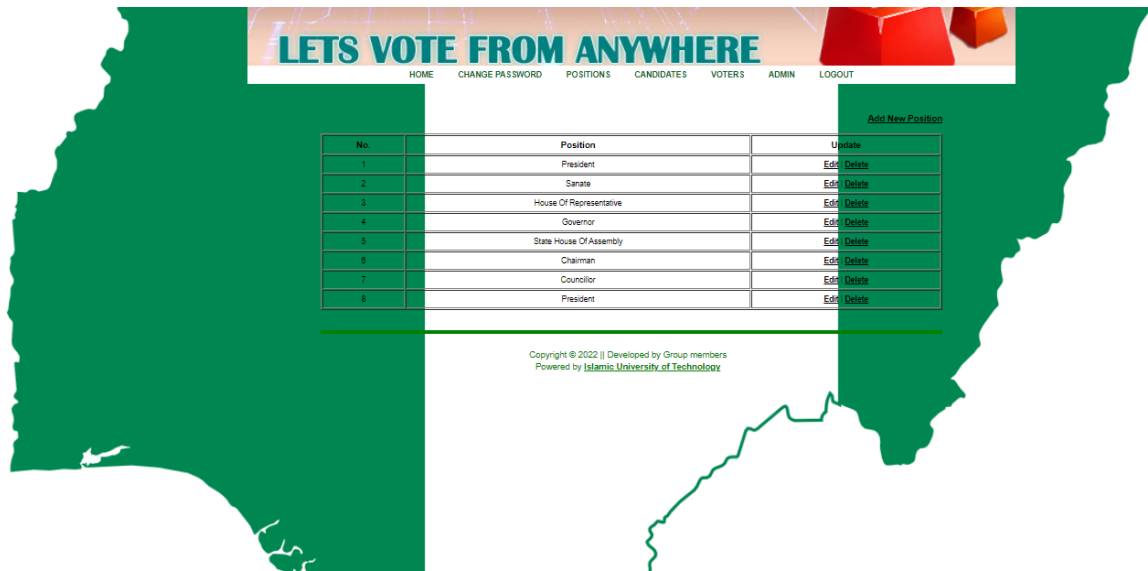
Figurce 10:Voting Category Page.

vi.Voting Page: This is the main voting page each position has its own voting page, 'it contains all the candidate participating on that position: a user need to select which candidate he wants cast his vote to and click vote button to confirm his vote, after a user cast his vote on that particular position, he will automatically be redirected to voting category, on the category he can select another position to cast on his vote, if a voter try to vote again on the same position, the system will remind him that he can only cast his vote once and then discard the vote without recording it.
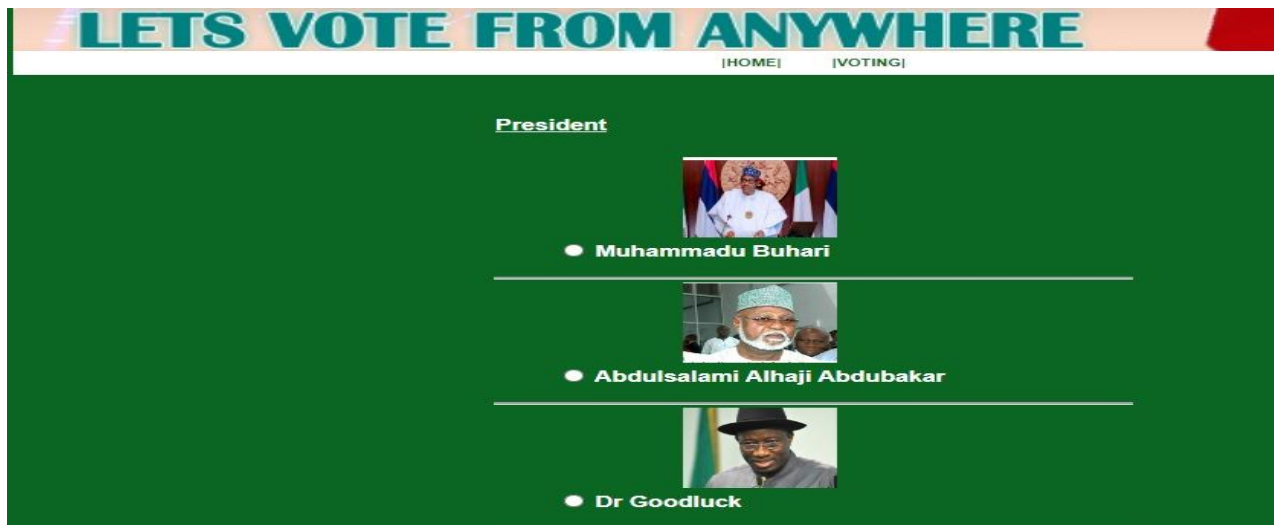
Figurce 11:Voting Page.

v.Result Page: This page contains all position and candidates that are participating on all the positions, each position and its contestants are separated from all positions, the page also contains vote count of each candidate and a percentage for each candidate according to the number of his vote, showing the winner of the election on each of the positions.

Name	Votes	Percentage
President		
Sani Abacha	7 votes	7%
Shehu Usman Aliyu Shagari	12 votes	13%
Dr Goodluck	10 votes	10%
Abdulsalami Alhaji Abdubakar	20 votes	21%
Muhammadu Buhari	47 votes	49%
Sanate		
Ahamad Babba Kaita	7 votes	7%
Ahmad Lawal	5 votes	5%
Abubakar Bukola	46 votes	48%
Dino Malaye	8 votes	8%
Shehu Sani	10 votes	10%
Kabiru Marafa	20 votes	21%
House Of Representative		
Musa Nuhu	8 votes	9%
Nasir Yahaya	46 votes	52%
Mustapha Sani	7 votes	8%
Dalhatu Shehu	11 votes	12%
Aliyu Muduru	17 votes	19%

Figurce 12: Result Page.

vi.Administrative Login: Administrators use this page to login to the control panel there are two kind of administrators on the system, Admin and super Admin, Admin can create and manage voters.

Figurce 13:Administrative Login.

vii.Admin Homepage: This is the admin control panel. in this page admin have all the access to the system, he can add new position, new voter, new candidate, he can also alter any voter or delete a voter or candidate or position, almost all the functionality of the system is here, such as searching for particular voter record, candidate or position.
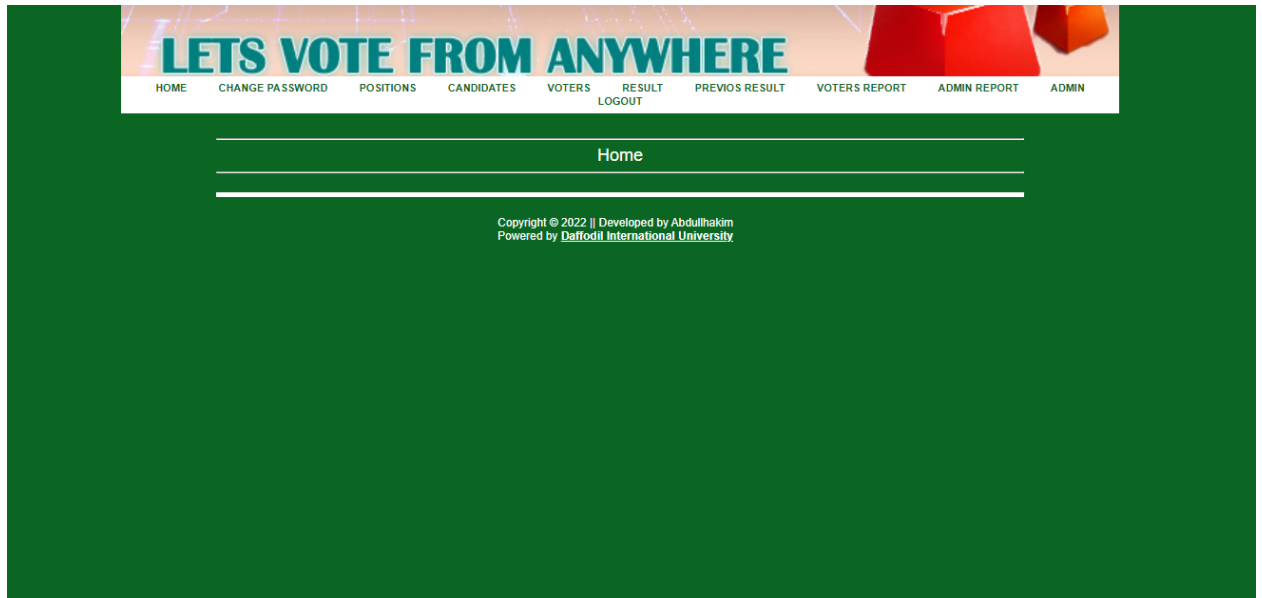
Figurce 14:Admin Homepage.

viii.Voter Registration Page: This is the voter registration page, it provides all the needed field such as voter id, name, department, year and password.
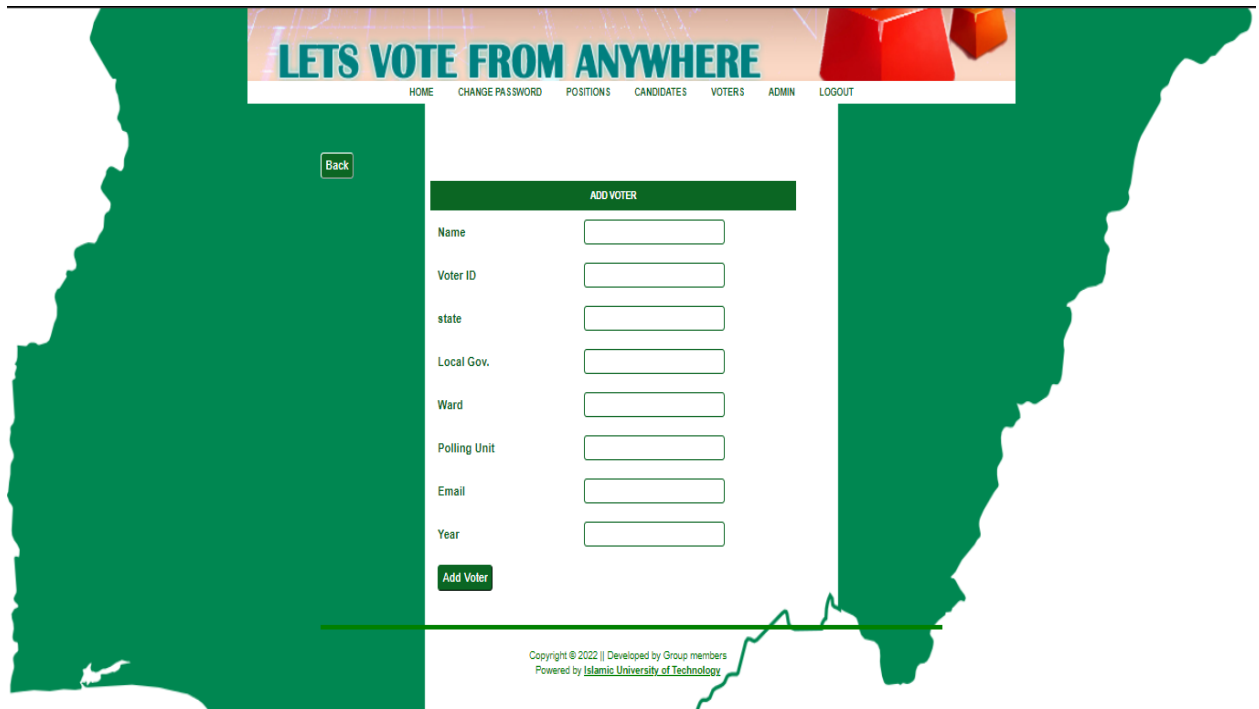
Figurce 15:Voter Registration Page.

ix.Candidate Registration Form: This page provides a form for registering new candidate, when filling the form, admin need to insert candidate id which is equal to his voter id, after inserting the id, the system will look up that voter name in voter's record and place it in candidate name, admin now can select a position in respect to the position that particular candidate wants to participate to, and then provide a candidate picture and the current session and click add.
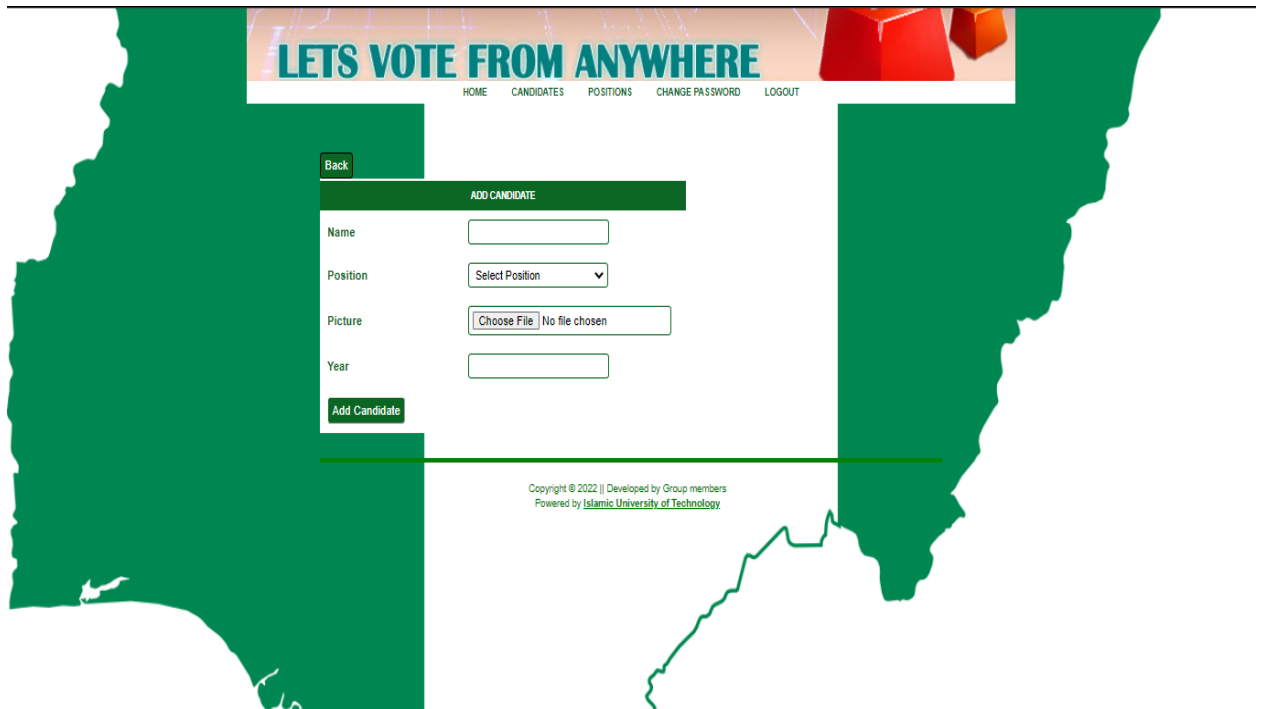
Figurce 16:Candidate Registration Form.

x.Admins Report: this is where super admin take a look at what other admins are doing on the system, from adding new candidate, positions, voters or anything like that.

xi.Rigging attempt: This page display to admins the list of voters who tried to vote more than once, the page display the voter name, position he tried to vote more than once on, number of try and date of last try.

14	Abubakar Aliyu	Trying to vote again	President	2022-05-23	1	Delete
15	Najamuddeen Lawal	Trying to vote again	Governor	2022-05-23	1	Delete
16	Abdul Malik Nasir	Trying to vote again	House Of Representative	2022-05-23	1	Delete
17	Abdul Malik Nasir	Trying to vote again	State House Of Assembly	2022-05-23	1	Delete
18	Umar Nasir	Trying to vote again	Governor	2022-05-23	1	Delete
19	Umar Nasir	Trying to vote again	State House Of Assembly	2022-05-23	1	Delete
20	Umar Nasir	Trying to vote again	Councillor	2022-05-23	1	Delete
21	Shamsu Bala	Trying to vote again	House Of Representative	2022-05-24	1	Delete
22	Shamsu Bala	Trying to vote again	Governor	2022-05-24	1	Delete
23	Ahmad Teejay	Trying to vote again	House Of Representative	2022-05-24	1	Delete
24	Ahmad Teejay	Trying to vote again	Councillor	2022-05-24	2	Delete
25	Mahin Mahmud	Trying to vote again	Governor	2022-05-24	1	Delete
26	Mahin Mahmud	Trying to vote again	Chairman	2022-05-24	1	Delete
27	Abuhuraira Abdulrahman	Trying to vote again	Chairman	2022-05-24	1	Delete
28	Abuhuraira Abdulrahman	Trying to vote again	Councillor	2022-05-24	1	Delete
29	Abdulrahman Muhammad	Trying to vote again	President	2022-05-24	1	Delete
30	Yankuba Danso	Trying to vote again	Chairman	2022-05-24	1	Delete
31	Lbrahim Aliyu	Trying to vote again	State House Of Assembly	2022-05-24	1	Delete
32	Ashiru Lsyaku	Trying to vote again	President	2022-05-24	1	Delete
33	Muhammad Tukur	Trying to vote again	House Of Representative	2022-05-24	1	Delete

Figurce 16:Admins Report and Rigging attempt

CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS.
5.1 Summary

In on-line legal system, a elector will use his her right on-line with none problem.

He or She should be registered 1st for him/her to vote Registration is especially done by the supervisor for security reasons. The supervisor registers the voters on a special web site of the system visited by him solely, by merely filling a registration type to register elector.

After registration, the elector is appointed a secret Username and watchword with that he/she will use to log into the system and luxuriate in services provided by the system like pick, checking results among others. If invalid/wrong details area unit submitted then the elector isn't registered to vote

5.2 Conclusion

This projected system permits a elector to forged his/her vote through net while not attending to kiosk, proxy vote or double pick isn't doable, quick to access, extremely secure, simple to take care of all data of pick, extremely economical and versatile.

The use of on-line pick has the potential to scale back or take away unwanted human errors. Additionally to its responsibility on-line pick will handle multiple modalities, and supply higher measurability for big elections.

The main side behind on-line electoral system is that it enabled America to bring out the new concepts that were sustained inside America for several days. This project offers the voters to forge simply through net. Vote reckoning is additionally created simple by the web electoral system since it's simply a matter of querying the info on-line electoral system is use by variety of faculty everywhere the planet these days. Developing an honest system is vital to the success of the system to stop system failures and to achieve wide acceptance the most effective technique obtainable. an honest on-line electoral system needs 10 characteristics that this technique already has. These are

i.Convenience

ii.Reliability

iii.Verifiability

iv.Flexibility

v.Consistency

vi.Social acceptance

vii.Democracy

viii.Nobility

ix.Accuracy

x.Privacy

In analyzing, designing, implementing, and maintaining standards, we considered these characteristics as the foundation. These standards were made in respect to Independent National Electoral Commission. Online Voting System will be an inexpensive and less time consuming method once a system exhibiting Independent National Electoral Commission standards and the above mentioned characteristics is implemented.

5.3 Recommendations.

After an enquiry and culmination of this project, it's extremely counseled that, the net legal system serves to be the simplest to place in use, particularly within the 21" century wherever citizenry square measure clench technology and wherever there's malicious struggle for power by leaders everywhere the planet. This struggle for power has resulted within the use of all approaches by the leaders in power to stay in their positions at no matter prices even though it suggests that applying vote rigging to win elections.

With this method in situ, variety of such issues shall be forgotten. It's conjointly counseled that the Independent National Electoral Commission of Nigeria ought to place the net legal system technology to observe to terminate a number of the issues they'll bear, throughout manual choice.

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THE SOURCE CODE.

```php
<?php
session_set_cookie_params(0);
session_start( );
if(isset($_SESSION['voter_id'])) {
 require_once('includes/connection.php');
 require_once('includes/functions.php');
 $session_voter_id = $_SESSION['voter_id'];
 $check_login_sql = "SELECT * FROM voters WHERE voter_id = '$session_voter_id'";
 $check_login_query = mysqli_query($link, $check_login_sql);
 $results = mysqli_fetch_assoc($check_login_query);
 $user = NULL;
 if(count($results) > 0) {
 $user = $results;
 }
}
if(!empty($user)):
?>
<head>
        <meta charset="utf-8">
        <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
        <link href="assets/css/default.css" rel="stylesheet" type="text/css">
        <link href="assets/css/candidate.css" rel="stylesheet" type="text/css">
        <title>||ONLINE VOTING SYSTEM ||</title>
<body>
<div id="header"></div>
<div id="menu">
        <ul>
                <li><a href="./">|Home|</a></li>
                <li><a href="voting.php">|Voting|</a></li>
```

```php
        </ul>
</div>
<?php
if(isset($_GET['candidates'])) {
        $candidates = $_GET['candidates'];
                                $rdate= date("y-m-d");


        if(isset($_POST['vote'])) {
                if(!empty($_POST['candidate']) && !empty($_POST['position'])) {
                        $candidate = $_POST['candidate'];
                        $position = $_POST['position'];
                        $voter_id = $user['voter_id'];
                        $check_voter_sql    =    "SELECT    *    FROM    `votes`    WHERE
`position`='$position' AND `voter`='$voter_id'";
                        $check_voter_query = mysqli_query($link, $check_voter_sql);
                        $check_voter = mysqli_num_rows($check_voter_query);
                        if($check_voter > 0) {
                                ?>
                                        <script>

                                        alert("Sorry, you can vote only once for a position");

                                        </script>

                                <?php
                                //$message = "Sorry, you can vote only once for a position.";
                                                $rig = "SELECT * FROM `rigging_attemp`
WHERE `position`='$position' AND `user`='$voter_id'";
                                $rigging = mysqli_query($link, $rig);
                                $attemp = mysqli_num_rows($rigging);
                                if($attemp ==1) {
```

```php
                    $update="update rigging_attemp set count= count+1 WHERE
`position`='$position' AND `user`='$voter_id' ";
                    $outcome = mysqli_query($link, $update);


                }
                else{
                    $rigging=mysqli_query($link,"INSERT                          INTO
`rigging_attemp`(`user`, `position`, `action`,`date`) VALUES ('$voter_id','$position','Trying to
vote again','$rdate')");
                }
                }else{
                    if(mysqli_query($link, "INSERT INTO `votes`(`name`, `position`,
`voter`) VALUES ('$candidate','$position','$voter_id')")) {
                        ?>
                        <script>


                        alert("You have successfully cast your vote ");


                        </script>


                        <?php
                        //$message = " You have successfully voted for
".$_POST['candidate'];
                    }else{
                        $message = "There have been an issue while updating the
vote. Please try again later.";
                    }
                }
            }
        }
```

```php
?>
    <table align="center" border="0" width="423">
        <tr>
            <th align="left" colspan="4" height="61" nowrap scope="col"><span
class="style2"><u><?php echo $candidates; ?></u></span></th>
        </tr>
        <div id="content">
        <?php if(isset($message) && !empty($message)) {
            echo $message;
         } ?>
        </div>
        <form    action="<?php    echo    htmlspecialchars($_SERVER["PHP_SELF"],
ENT_QUOTES, "utf-8"); ?>?candidates=<?php echo $candidates; ?>" method="POST">
            <?php
                $vote_options_sql  =  "SELECT  *  FROM  `candidate`  WHERE
`position`='$candidates'";

                $vote_options = mysqli_query($link, $vote_options_sql);
                while($voter = mysqli_fetch_assoc($vote_options)) {
            ?>
            <tr>
                <th align="left" nowrap scope="row" width="39"> </th>
                <th   align="left"   nowrap   scope="row"   width="101"><img
height="84" src="admin/candidates/<?php echo $voter['name']; ?>/<?php echo $voter['picture'];
?>" width="101"></th>
                <th align="left" nowrap width="2"> </th>
            </tr>
            <tr>
                <th align="left" colspan="4" nowrap scope="row" style="border-
bottom-style:groove">
                    <blockquote>
```

```php
                                        <!--input   class="button"   id="vote"   name="candidate"
type="submit" value="<?php echo $voter['name']; ?>"-->
                                        <input        name="candidate"        type="radio"
value="<?php echo $voter['name']; ?>">
                                        <?php echo $voter['name']; ?>
                                        <input       name="position"       type="hidden"
value="<?php echo $voter['position']; ?>">
                                </blockquote>
                        </th>
                </tr>
                <?php } ?>
                        <td nowrap scope="row">
                                <input       class="button"       id="vote"       name="vote"
type="submit" value="VOTE" onclick="return confirm('You Are About to Cast Your Vote, Do
you Wish to Continue?')">
                        </td>
                        <td colspan="2" nowrap> </td>
                </tr>
        </form>
    </table>
    <p> </p>
    <?php
                }
include_once("html/footer.php");
else:
header("Location: login_vote.php");
endif; ?>
<?php
session_set_cookie_params(0);
session_start();
if(isset($_SESSION['user_id'])) {
```

```php
        require_once('../includes/connection.php');

        require_once('../includes/functions.php');

        $session_id = $_SESSION['user_id'];

        $check_login_sql = "SELECT * FROM admin WHERE id = '$session_id'";

        $check_login_query = mysqli_query($link, $check_login_sql);

        $results = mysqli_fetch_assoc($check_login_query);

        $user = NULL;

        if(count($results) > 0) {

        $user = $results;

        }

}

if(!empty($user)):

include_once("html/header.php");

?>
```

```css
<style>

input {

        font-family:Arial;

        font-size:14px;

}

label{

        font-family:Arial;

        font-size:14px;

        color:#0B6623;

        font-weight: bold;

}

.tblSaveForm {

        border-top:2px #FFFFFF solid;

        background-color: #FFFFFF;

}

.tableheader {

        background-color: #0B6623;
```

```css
}
.btnSubmit {
        background-color:#0B6623;
        padding:5px;
        border-color:#0B6623;
        border-radius:4px;
        color:white;
}
.btncancel {
        background-color:#0B6623;
        padding:5px;
        border-color:#FFFFFF;
        border-radius:4px;
        color:white;
}
.message {
        color: #FFFFFF;
        text-align: center;
        width: 100%;
}
.txtField {
        padding: 5px;
        border:#0B6623 1px solid;
        border-radius:4px;
}
.required {
        color: #0B6623;
        font-size:11px;
        font-weight:italic;
        padding-left:10px;
}
```

```php
#footer p {
        margin: 0px;
        padding: 20px 10px 0px 0px;
        color: #FFFFFF;
        text-align:center;
}
</style>
<?php $backurl = "./"; ?>
<div id="content">
<?php
if(isset($_GET['add'])) {

        if(isset($_POST['add_voter'])) {
                $voter_id = strtoupper($_POST['voter_id']);
                $name = ucwords(strtolower($_POST['name']));
                $state = $_POST['state'];
                $email = $_POST['email'];
                $year = $_POST['year'];
                $local = $_POST['local'];
                $pass=$_POST['password'];
                $password = password_hash($_POST['password'], PASSWORD_BCRYPT);
                $ward = $_POST['ward'];
                $unit = $_POST['unit'];
                $to =$email;
                $subject ='Logins Creadentials';
                $message ="Here are your login creadentials, your user ID is " .$voter_id. " and
password " .$pass;
                $headers ='From:  ahmadasheerelrufai@gmail.com' . "\r\n" .'MIME-Version: 1.0'
."\r\n" .'Content-type: text/html; charset=utf-8';
                if(!mail($to,$subject,$message,$headers))
                {
```

```php
                echo "Email sending failed";
            }
            if(!empty($voter_id) && !empty($name) && !empty($state)&& !empty($email)
&& !empty($year) && !empty($local) && !empty($password) && !empty($ward)){
                $check_sql = "SELECT * FROM `voters` WHERE `voter_id`='$voter_id'";
                $check_duplicate_query = mysqli_query($link, $check_sql);
                $check_duplicate = mysqli_num_rows($check_duplicate_query);
                if($check_duplicate > 0) {
                    $message = "Sorry, a Voter already exist with the same Voter ID.";
                }else{
                    $sql ="INSERT INTO `voters`(`voter_id`, `name`, `state`, `year`,
`local`, `password`, `ward`, `p_unit`, `email`) VALUES ( '$voter_id', '$name', '$state', '$year',
'$local', '$password', '$ward', '$unit', '$email')";
                    $query = mysqli_query($link, $sql);
                    if($query) {
                    $sql2        ="INSERT        INTO        `password_log`(`user`)
VALUES('$voter_id')";
                    $query2 = mysqli_query($link, $sql2);
                        $message = "<span style='color:#FFFFFF;'>Account for " .
$name . " is created.</span>";
                        echo $pass;
                }else{
                        $message  =  "An  Error  occured  while  creating  an
account.<br>";
                        $message .= mysqli_error($link);
                    }
                }
            }else{
                $message = "Please fill in all the fields to create an account.";
            }
        }
```

```
?>
        <form action="<?php echo htmlspecialchars($_SERVER["PHP_SELF"], ENT_QUOTES,
"utf-8"); ?>?add" id="frmChange" method="post" name="frmChange" onsubmit="return
validatePassword()">
            <div style="width:500px;">
                <div class="message">
                    <?php if(isset($message)) { echo $message; } ?>
                </div><br>
                <input                  class="btncancel"              name="QS_Back"
onclick="javascript:window.location='<?php echo $backurl; ?>'" type="button" value="Back">
                <table     align="center"    border="0"    cellpadding="10"    cellspacing="0"
class="tblSaveForm" width="500">
                    <tr class="tableheader">
                        <td    align="center"    colspan="2"    style="color:white;    text-
transform: uppercase; font-weight:bold;">Add Voter</td>
                    </tr>
                    <tr>
                    <td width="40%"><label>Name</label></td>
                    <td      width="60%"><input      class="txtField"      name="name"
type="text"><span class="required" id="name"></span></td>
                    </tr>
                    <tr>
                    <td width="40%"><label>Voter ID</label></td>
                    <td      width="60%"><input      class="txtField"      name="voter_id"
type="text"><span class="required" id="voter_id"></span></td>
                    </tr>
                    <tr>
                    <td width="40%"><label>state</label></td>
                    <td      width="60%"><input      class="txtField"      name="state"
type="text"><span class="required" id="state"></span></td>
```

```html
</tr>
<tr>
<td width="40%"><label>Local Gov.</label></td>
<td width="60%"><input class="txtField" name="local" type="text"><span class="required" id="year"></span></td>
</tr>
<tr>
<td width="40%"><label>Ward</label></td>
<td width="60%"><input class="txtField" name="ward" type="text"><span class="required" id="ward"></span></td>
</tr>
<tr>
<td width="40%"><label>Polling Unit</label></td>
<td width="60%"><input class="txtField" name="unit" type="text"><span class="required" id="unit"></span></td>
</tr>
<tr>
<td width="40%"><label>Email</label></td>
<td width="60%"><input class="txtField" name="email" type="email"><span class="required" id="email"></span></td>
</tr>
<tr>
<td width="40%"><label>Year</label></td>
<td width="60%"><input class="txtField" name="year" type="text"><span class="required" id="year"></span></td>
</tr>
<tr hidden>
<td><label>Password</label></td>
<td><input class="txtField" name="password" type="password" value="<?php echo substr(md5(rand()), 0, 6); ?>"><span class="required" id="password"></span></td>
```

```
                        </tr>
                        <tr hidden>
                    <td><label hidden>Confirm Password</label></td>
                    <td><input        class="txtField"        name="confirmPassword"
type="password" value="<?php echo substr(md5(rand()), 0, 6); ?>" ><span class="required"
id="confirmPassword" ></span></td>
                        </tr>
                        <tr>
                    <td   colspan="2"><input   class="btnSubmit"   name="add_voter"
type="submit" value="Add Voter"></td>
                        </tr>
                </table>
          </div>
     </form>
     <?php
     }elseif(isset($_GET['edit'])) {

     if(isset($_POST['edit_voter'])) {
            $name = ucwords(strtolower($_POST['name']));
            $voter_id = $_POST['voter_id'];
            $state = $_POST['state'];
            $email = $_POST['email'];
            $year = $_POST['year'];
            $local = $_POST['local'];
            $ward = $_POST['ward'];
            $unit = $_POST['unit'];
            $voter_id = $_POST['voter_id'];
            $id = $_GET['edit'];

            if(!empty($name) && !empty($state)&& !empty($email) && !empty($year) &&
!empty($local) && !empty($ward)) {
```

```php
                    $update_sql              ="UPDATE              `voters`              SET
`name`='$name',`voter_id`='$voter_id',`state`='$state',`year`='$year',`local`='$local',`ward`='$wa
rd',`p_unit`='$unit', `email`='$email' WHERE `id`= '$id'";
                    $update = mysqli_query($link, $update_sql);
                        if($update) {
                            $message    =    "<span    style='color:#FFFFFF;'>Changes
Saved.</span>";
                        }else{
                            $message = "An Error occured while updating voter
details.<br>";
                            $message .= mysqli_error($link);
                        }
            }else{
                $message = "Please fill in all the fields to edit voter details.";
            }
        }


    $voter_info_sql = "SELECT * FROM `voters` WHERE `id`='".$_GET["edit"].""'";
    $voter_info_query = mysqli_query($link, $voter_info_sql);
    $s_info = mysqli_fetch_assoc($voter_info_query);
?>
    <form                            action="<?php                            echo
htmlspecialchars($_SERVER["PHP_SELF"].'?edit='.$_GET["edit"], ENT_QUOTES, "utf-8");
?>" id="frmChange" method="post" name="frmChange" onsubmit="return validatePassword()">
        <div style="width:500px;">
            <div class="message">
                <?php if(isset($message)) { echo $message; } ?>
            </div><br>
            <input              class="btncancel"              name="QS_Back"
onclick="javascript:window.location='<?php echo $backurl; ?>'" type="button" value="Back">
```

```html
<table   align="center"   border="0"   cellpadding="10"   cellspacing="0"
class="tblSaveForm" width="500">
                    <tr class="tableheader">
                        <td   align="center"   colspan="2"   style="color:white;   text-
transform: uppercase; font-weight:bold;">Edit Voter</td>
                    </tr>
                    <tr>
                    <td width="40%"><label>Name</label></td>
                    <td width="60%"><input class="txtField" name="name" type="text"
value="<?php echo $s_info['name'] ?>"><span class="required" id="name"></span></td>
                    </tr>
                    <tr>
                    <td width="40%"><label>Voter ID</label></td>
                    <td    width="60%"><input    class="txtField"    name="voter_id"
type="text"    value="<?php    echo    $s_info['voter_id']    ?>"><span    class="required"
id="voter_id"></span></td>
                    </tr>
                    <tr>
                    <td width="40%"><label>state</label></td>
                    <td width="60%"><input class="txtField" name="state" type="text"
value="<?php echo $s_info['state'] ?>"><span class="required" id="state"></span></td>
                    </tr>
                    <tr>
                    <td width="40%"><label>Local Gov.</label></td>
                    <td width="60%"><input class="txtField" name="local" type="text"
value="<?php echo $s_info['local'] ?>"><span class="required" id="year"></span></td>
                    </tr>
                    <tr>
                    <td width="40%"><label>ward</label></td>
                    <td width="60%"><input class="txtField" name="ward" type="text"
value="<?php echo $s_info['ward'] ?>"><span class="required" id="ward"></span></td>
```

```
                                    </tr>
                                    <tr>
                            <td width="40%"><label>Polling Unit</label></td>
                            <td  width="60%"><input class="txtField" name="unit" type="text"
value="<?php echo $s_info['p_unit'] ?>"><span class="required" id="ward"></span></td>
                                    </tr>
                                    <tr>
                            <td width="40%"><label>Email</label></td>
                            <td     width="60%"><input    class="txtField"    name="email"
type="email" value="<?php echo $s_info['email'] ?>"><span class="required" id="email"
></span></td>
                                    </tr>
                                    <tr>
                            <td width="40%"><label>Year</label></td>
                            <td width="60%"><input class="txtField" name="year" type="text"
value="<?php echo $s_info['year'] ?>"><span class="required" id="year"></span></td>
                                    </tr>
                                    <tr>
                            <td   colspan="2"><input   class="btnSubmit"   name="edit_voter"
type="submit" value="Save Changes"></td>
                                    </tr>
                            </table>
                    </div>
            </form>
            <script type="text/javascript">
            function validatePassword() {
            var newPassword,confirmPassword,output = true;

            newPassword = document.frmChange.password;
            confirmPassword = document.frmChange.confirmPassword;
```

```
if(!newPassword.value) {
        newPassword.focus();
        document.getElementById("newPassword").innerHTML = "required";
        output = false;
}
else if(!confirmPassword.value) {
        confirmPassword.focus();
        document.getElementById("confirmPassword").innerHTML = "required";
        output = false;
}
if(newPassword.value != confirmPassword.value) {
        newPassword.value="";
        confirmPassword.value="";
        newPassword.focus();
        document.getElementById("confirmPassword").innerHTML = "Password did not
match, please try again.";
        output = false;
}
return output;
}
</script>
<?php
}elseif(isset($_GET['delete']) && isset($_GET['vot_id'])) {
        $voter_id = $_GET['vot_id'];
        $delete_details_sql = "SELECT * FROM `voters` WHERE voter_id='$voter_id'" ;
        $delete_details = mysqli_query($link, $delete_details_sql);
        $delete_detail = mysqli_fetch_assoc($delete_details);
?>
<p>Do you really want to delete <?php echo $delete_detail['name']; ?> whose Voter ID is
<?php echo $_GET['vot_id']; ?>?
```

```php
        <p><a           href="?delete&vot_id=<?php         echo         $_GET['vot_id'];
?>&no">No</a>    <a        href="?delete&vot_id=<?php       echo
$_GET['vot_id']; ?>&yes">Yes</a>
        </p>
        <?php
        if(isset($_GET['yes'])) {
                $delete_details_sql = "DELETE FROM `voters` WHERE voter_id='$voter_id'";
                $delete_details = mysqli_query($link, $delete_details_sql);
                if($delete_details) {
                        echo
'<script>window.location.replace("'.$_SERVER["PHP_SELF"].'?delete_status=1");</script>';
                }
        }elseif(isset($_GET['no'])) {
                echo
'<script>window.location.replace("'.$_SERVER["PHP_SELF"].'");</script>';
        }
        ?>
        <?php }else{ ?>
        <?php
        if(isset($_GET['delete_status'])) {
                if($_GET['delete_status'] == 1) {
                        echo "Successfully deleted the user.";
                }
        }
        ?>
        <a style="float: right;" href="<?php echo $_SERVER['PHP_SELF'].'?add'; ?>">Add New
Voter</a><br><br>
        <table width="800px" border="1" style="text-align:center;">
                <tr>
                        <th style="text-align: center;padding: 5px">No.</th>
                        <th style="text-align: center;padding: 5px">Name</th>
```

```php
          <th style="text-align: center;padding: 5px">Voter ID</th>
          <th style="text-align: center;padding: 5px">state</th>
          <th style="text-align: center;padding: 5px">Local Gov.</th>
          <th style="text-align: center;padding: 5px">Ward</th>
          <th style="text-align: center;padding: 5px">Polling Unit</th>
          <th style="text-align: center;padding: 5px">Email</th>
          <th style="text-align: center;padding: 5px">Year</th>
          <th style="text-align: center;padding: 5px">Update</th>
     </tr>
     <?php
     $sn=1;
     $voters_sql = "SELECT * FROM voters ORDER BY `id`";
     $voters = mysqli_query($link, $voters_sql);
     while ($voter_row = mysqli_fetch_assoc($voters)) { ?>
     <tr>
          <td style="text-align: center;padding: 5px"><?php echo $sn; ?></td>
          <td          style="text-align:          center;padding:          5px"><?php          echo
$voter_row['name'] ?></td>
          <td          style="text-align:          center;padding:          5px"><?php          echo
$voter_row['voter_id'] ?></td>
          <td style="text-align: center;padding: 5px"><?php echo $voter_row['state']
?></td>
          <td style="text-align: center;padding: 5px"><?php echo $voter_row['local']
?></td>
          <td style="text-align: center;padding: 5px"><?php echo $voter_row['ward']
?></td>
          <td          style="text-align:          center;padding:          5px"><?php          echo
$voter_row['p_unit'] ?></td>
          <td          style="text-align:          center;padding:          5px"><?php          echo
$voter_row['email'] ?></td>
```

```php
                    <td style="text-align: center;padding: 5px"><?php echo $voter_row['year']
?></td>
                    <td          style="text-align:          center;padding:          5px"><a
href="manage_voters.php?edit=<?php     echo     $voter_row['id']     ?>">Edit</a>     |<?php
if($user['role']==1)     {     ?>     <a     href="manage_voters.php?delete&vot_id=<?php     echo
$voter_row['voter_id'] ?>">Delete</a><?php } ?></td>
            </tr>
            <?php $sn++; } ?>
        </table>
        <?php } ?>
</div>
<?php
include_once("html/footer.php");
else:
?>
<!DOCTYPE html>
<html>
  <head>
    <title>Login</title>
  </head>
  <body onload=window.location='login.php'>
  </body>
</html>
<?php endif; ?>
```