A

Seminar report

On

Online Voting System

Submitted in partial fulfillment of the requirement for the award of degree
of Bachelor of Technology in Computer Science

SUBMITTED TO:

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Acknowledgement

I would like to thank respected Mr…….. and Mr. ……..for giving me such a wonderful opportunity to expand my knowledge for my own branch and giving me guidelines to present a seminar report. It helped me a lot to realize of what we study for.

Secondly, I would like to thank my parents who patiently helped me as i went through my work and helped to modify and eliminate some of the irrelevant or un-necessary stuffs.

Thirdly, I would like to thank my friends who helped me to make my work more organized and well-stacked till the end.

Next, I would thank Microsoft for developing such a wonderful tool like MS Word. It helped my work a lot to remain error-free.

Last but clearly not the least, I would thank The Almighty for giving me strength to complete my report on time.

Preface

I have made this report file on the topic **Online Voting System**; I have tried my best to elucidate all the relevant detail to the topic to be included in the report. While in the beginning I have tried to give a general view about this topic.

My efforts and wholehearted co-corporation of each and everyone has ended on a successful note. I express my sincere gratitude to ……..who assisting me throughout the preparation of this topic. I thank him for providing me the reinforcement, confidence and most importantly the track for the topic whenever I needed it.

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ABSTRACT

The word “vote” means to choose from a list, to elect or to determine. The main goal of voting (in a scenario involving the citizens of a given country) is to come up with leaders of the people’s choice.

Most countries, Kenya not an exception have problems when it comes to voting. Some of the problems involved include ridging votes during election, insecure or inaccessible polling stations, inadequate polling materials and also inexperienced personnel.

This online voting/polling system seeks to address the above issues. It should be noted that with this system in place, the users, citizens in this case shall be given ample time during the voting period. They shall also be trained on how to vote online before the election time.

INTRODUCTION TO ONLINE VOTING SYSTEM

"ONLINE VOTING SYSTEM" is an online voting technique. In this system people who have citizenship of Kenya and whose age is above 18 years of age and any sex can give his\her vote online without going to any physical polling station. There is a database which is maintained in which all the names of voters with complete information is stored.

In "ONLINE VOTING SYSTEM" a voter can use his\her voting right online without any difficulty. He\She has to be registered first for him/her to vote. Registration is mainly done by the system administrator for security reasons. The system Administrator registers the voters on a special site of the system visited by him only by simply filling a registration form to register voter. Citizens seeking registration are expected to contact the system administrator to submit their details. After the validity of them being citizens of India has been confirmed by the system administrator by comparing their details submitted with those in existing databases such as those as the Registrar of Persons, the citizen is then registered as a voter.

After registration, the voter is assigned a secret Voter ID with which he/she can use to log into the system and enjoy services provided by the system such as voting. If invalid/wrong details are submitted, then the citizen is not registered to vote.

SECURITY ISSUES OF ONLINE VOTING

Foreign experience revealed that they are often confronted by security issues while the online voting system is running. The origin of the security issues was due to not only outsider (such as voters and attackers) but also insider (such as system developers and administrators), even just because the inheritance of some objects in the source code are unsuitable. These errors caused the voting system to crash.

The proposed solutions were correspondingly outlined to hold back these attacks. For example, to avoid hacker making incursion into the voting system via network, we can design our system to transmit data without network. Another example is to limit voter to input particular data, so that we can prevent the command injection from running

Requirements:

1) Registration of the voter is done by ELECTION COMMISION OF INDIA.
2) ELECTION COMMISION OF INDIA can change the information any time if required.
3) Registration of the Voter depends upon the information filled by the user.
4) Voter is given a unique ID and PASSWORD.
5) In the DATABASE information of every voter is stored.
6) Database shows the information of every user.

Problems with the Existing Voter Registration System

The problems of the existing manual system of voting include among others the following:

1. **Expensive and Time consuming**: The process of collecting data and entering this data into the database takes too much time and is expensive to conduct, for example, time and money is spent in printing data capture forms, in preparing registration stations together with human resources, and there after advertising the days set for registration process including sensitizing voters on the need for registration, as well as time spent on entering this data to the database.

2. **Too much paper work**: The process involves too much paper work and paper storage which is difficult as papers become bulky with the population size.

3. **Errors during data entry:** Errors are part of all human beings; it is very unlikely for humans to be 100 percent efficient in data entry.

4. **Loss of registration forms:** Some times, registration forms get lost after being filled in with voters' details, in most cases these are difficult to follow-up and therefore many remain unregistered even though they are voting age nationals and interested in exercising their right to vote.

5. **Short time provided to view the voter register:** This is a very big problem since not all people have free time during the given short period of time to check and update the voter register.

6. Above all, a number of voters end up being locked out from voting.

SOFTWARE REQUIREMENTS:

i. **MYSQL DBMS-** It allows combination, extraction, manipulation and organization of data in the voters' database. It is platform independent and therefore can be implemented and used across several such as Windows, Linux server and is compatible with various hardware mainframes. It is fast in performance, stable and provides business value at a low cost.

ii. **NetBeans IDE 7.1.2-** The NetBeans IDE is an award-winning integrated development environment available for Windows, Mac, Linux, and Solaris. The NetBeans project consists of an open-source IDE and an application platform that enable developers to rapidly create web, enterprise, desktop, and mobile applications using the Java platform, as well as PHP, JavaScript and Ajax, Groovy and Grails, and C/C++.

The NetBeans project is supported by a vibrant developer community and offers extensive documentation and training resources as well as a diverse selection of third-party plugins.

iii. **JAVA coding-**This is for advanced user who find PHP codes easy to work with.

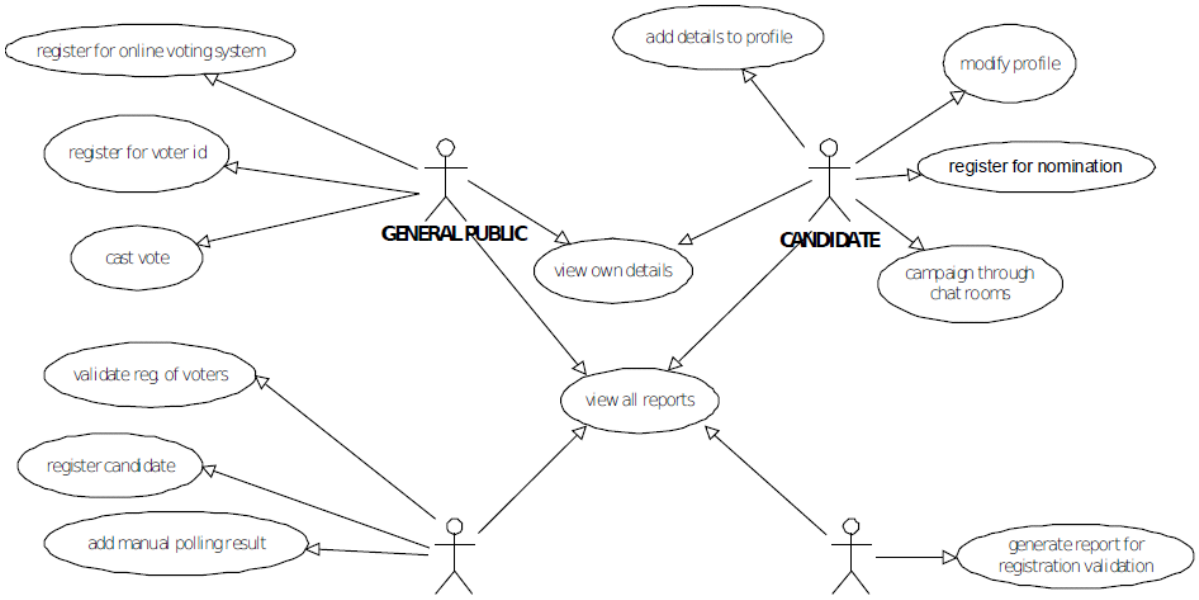
iv. **Testing-** is done via WAMPSERVER.

v. **Web browsers**: Mozilla Firefox, Google chrome, Opera and Internet Explorer

vi. **Reporting Tool** i.e. through Data Report.

HARDWARE REQUIREMENTS:

- **Microsoft Windows XP Professional SP3/Vista SP1/Windows 7 Professional:**
  - **Processor:** 800MHz Intel Pentium III or equivalent
  - **Memory:** 512 MB
  - **Disk space:** 750 MB of free disk space
- **Ubuntu 9.10:**
  - **Processor:** 800MHz Intel Pentium III or equivalent
  - **Memory:** 512 MB
  - **Disk space:** 650 MB of free disk space



(BLOCK DIAGRAM)

FRONT – END AND BACK-END

In their most general meanings, the terms front end and back end refer to the initial and the end stages of a process flow. In software design, the **front-end** is the part of a software system that deals with the user, and the **back-end** is the part that processes the input from the front-end. The separation of software systems into "front ends" and "back ends" is a kind of abstraction that helps to keep different parts of the system separated. The general idea is that the front-end is responsible for collecting input from the user, which can be in a variety of forms, and processing it in such a way that it conforms to a specification that the back-end can use. The connection of the front-end to the back-end is a kind of interface.

Front-end and back-end are terms used to characterize program interfaces and services relative to the initial user of these interfaces and services. (The "user" may be a human being or a program.) A ”front-end” application is one that application users interact with directly. A "back-end" application or program serves indirectly in support of the front-end services, usually by being closer to the required resource or having the capability to communicate with the required resource. The back-end application may interact directly with the front-end or, perhaps more typically, is a program called from an intermediate program that

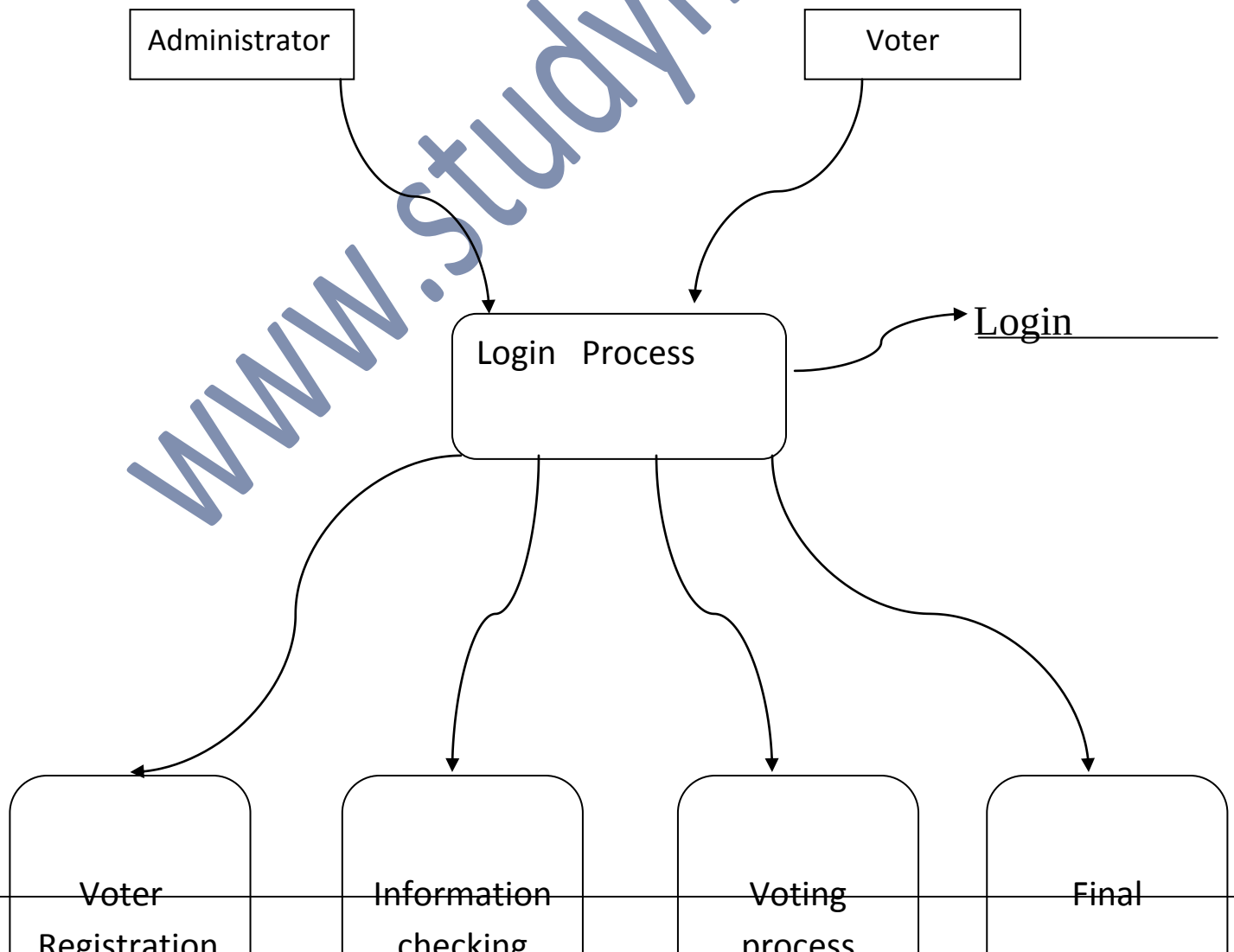
mediates front-end and back-end activities. These terms acquire more special meanings in particular areas:-

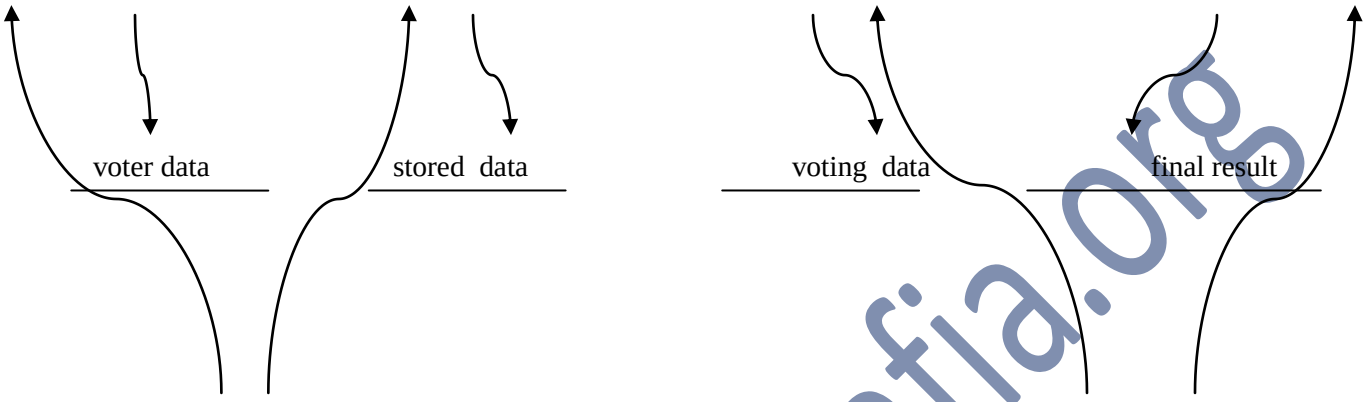
(1) For software applications, front end is the same as user interface.

(2) In client/server applications, the client part of the program is often called the front end and the server part is called the back end.

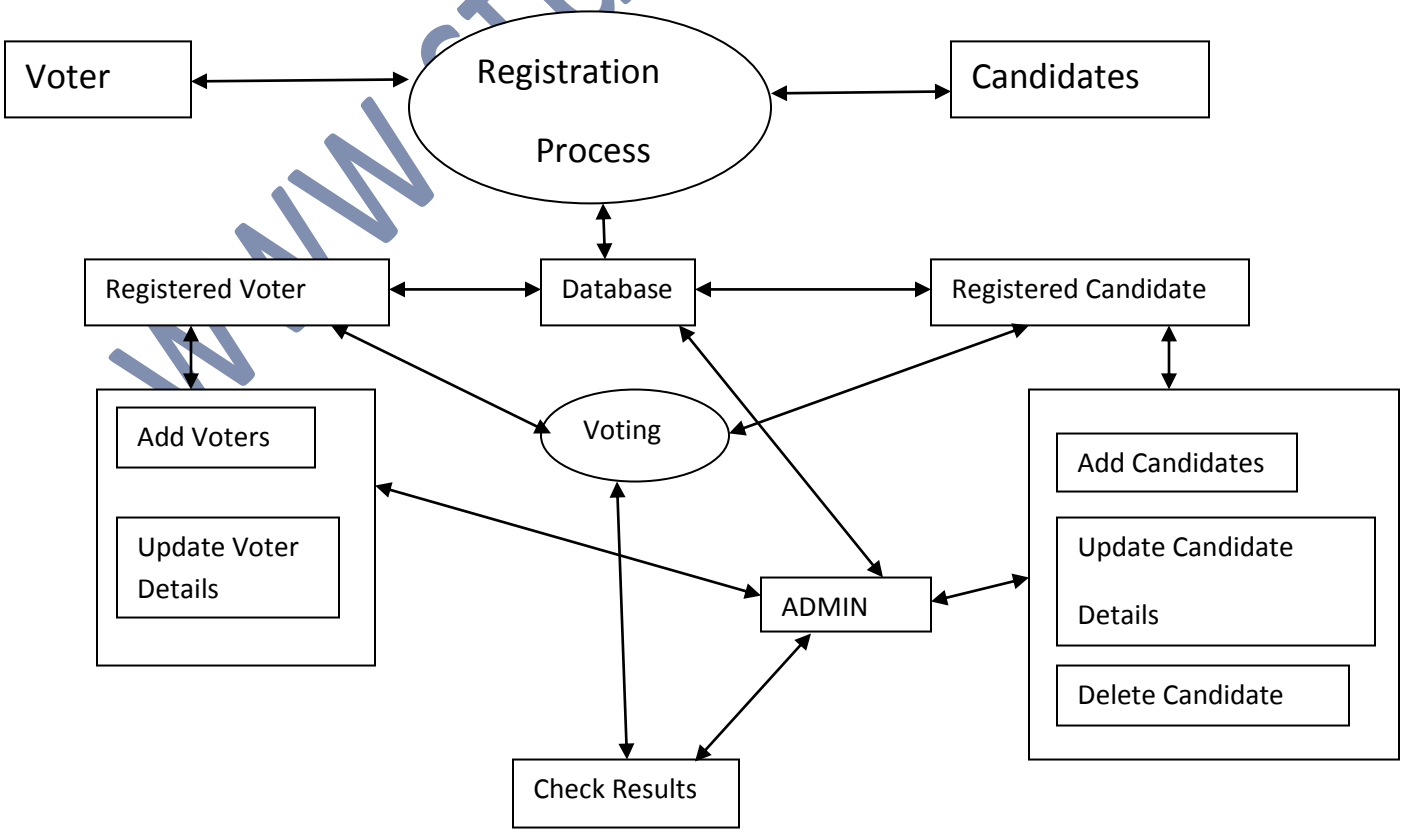
(3) Compilers, the programs that translate source code into object code, are often composed of two parts: a front end and a back end. The front end is responsible for checking syntax and detecting errors, whereas the back end performs the actual translation into object code.

Data Flow Diagram:



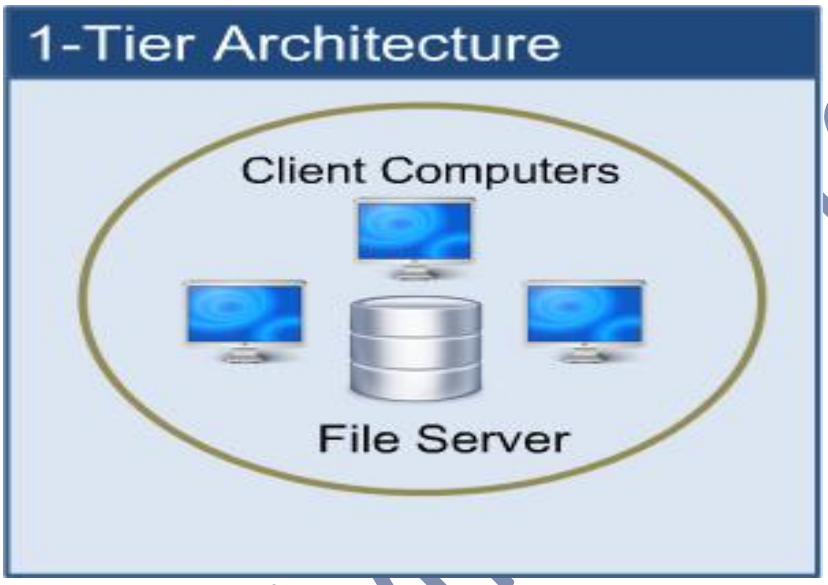


ER Diagram:



Architecture:

One Tier Architecture:



When automation first hit business, it was in the form of a huge "Mainframe" computer. Here, a central computer served the whole business community and was accessed via dumb terminals. All processing took place on a single computer - and therefore in one place. All resources associated with the computer (tape and disk drives, printers etc.) were attached to this same computer. This is single tier (or 1-tier) computing. It is simple, efficient, uncomplicated, but terribly expensive to run.

All users run their programs from a single machine. The ease with which deployment and even development occurs makes this model very attractive. The cost of the central machine makes this architecture prohibitive for most companies, especially as system costs and return on investment (ROI) are looked at carefully nowadays.

Data Base Tables:-

This project uses many tables:

- Admin
- Voter
- Candidate

Admin Table:-

Field Name	Data Type	Description
Username	Varchar	Login id for Admin.(Primary key)
Password	Varchar	Password for Login

Voter Table:-

Field Name	Data Type	Description
VoterId	Integer	Login id for Voter(Primary key)
Name	Varchar	Name of the voter
Sex	Varchar	Sex of voter
Age	Integer	Age of voter
City	Varchar	City of voter

Security	Varchar	Security Question
Status	Boolean	Status of voter(he/she can vote or not)

Candidate Table:-

Field Name	Data Type	Description
Symbol	Varchar	Party Symbol (Primary key)
Name	Varchar	Name of the voter
Sex	Varchar	Sex of voter
Age	Integer	Age of voter
City	Varchar	City of voter
Count	Integer	Count the no of votes

Database queries:

```
create database nitin
```

```
create table admin(Username varchar(20),Password varchar(20))
```

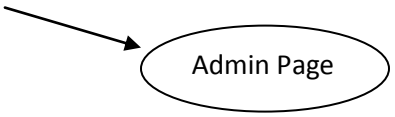
```
insert into admin values('Administrator,'nitin'))
```

```
create table voter(VoterId varchar(11) PRIMARY KEY ,Name varchar(20), Sex
varchar(10),Age integer,City varchar(20),Security varchar(20),Status boolean)
```

```
create table candidate(Symbol varchar(11) PRIMARY KEY ,Name varchar(20), Sex
varchar(10),Age integer,City varchar(20),count integer)
```

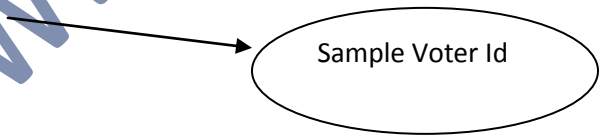
UserName **Password**

Administrator nitin



Voter Id

123456



CONCLUSION

This Online Voting system will manage the Voter's information by which voter can login and use his voting rights. The system will incorporate all features of Voting system. It provides the tools for maintaining voter's vote to every party and it count total no. of votes of every party. There is a DATABASE which is maintained by the ELECTION COMMISION OF INDIA in which all the names of voter with complete information is stored.

In this user who is above 18 year's register his/her information on the database and when he/she want to vote he/she has to login by his id and password and can vote to any party only single time. Voting detail store in database and the result is displayed by calculation. By online voting system percentage of voting is increases. It decreases the cost and time of voting process. It is very easy to use and It is vary less time consuming. It is very easy to debug.

APPENDIX :

SNAPSHOTS

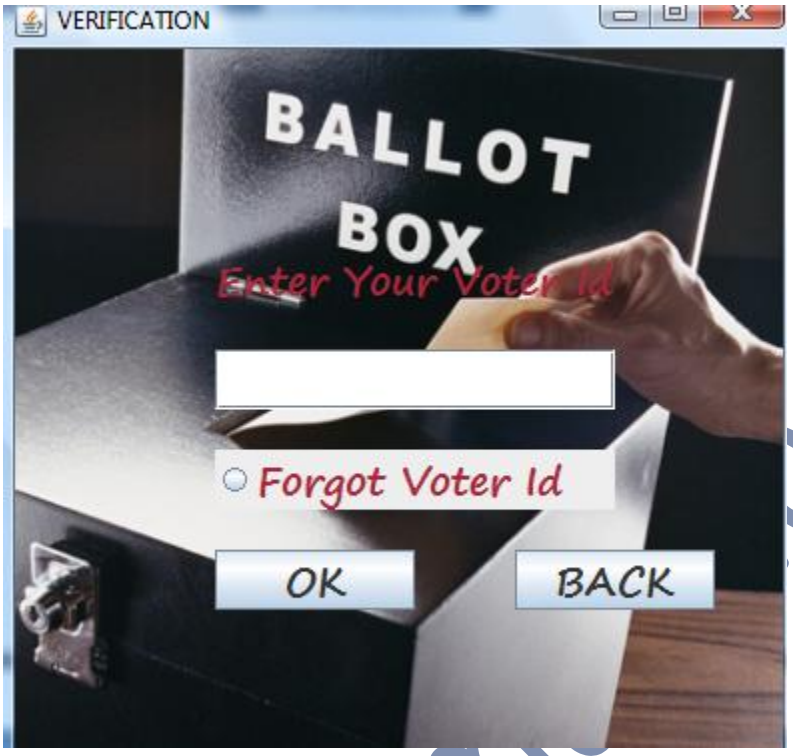

```
package project1;

import java.awt.Color;
import java.awt.Font;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.sql.Connection;
```

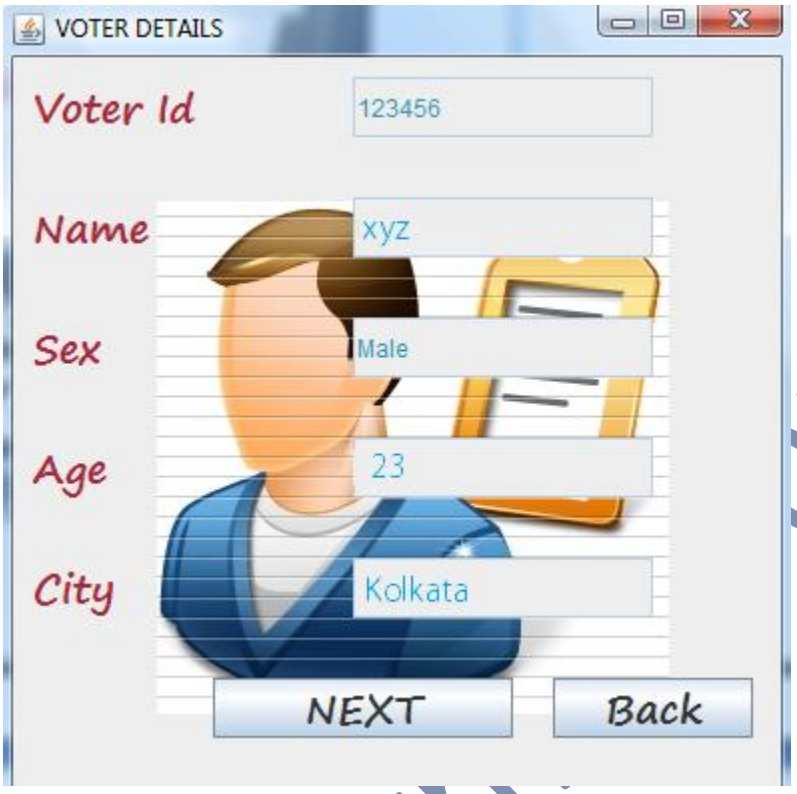
```
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;
import javax.swing.*;

public class Project1 implements ActionListener
{
   int count=0;
   JFrame f;
   JLabel l,j;
   JButton b1,b2,b3,b4;
   List l1=new List();
   ImageIcon ic;

   public Project1()
   {
      f=new JFrame("WELCOME");
      l=new JLabel("Login As:");
      b1=new JButton("Voter");
      b2=new JButton("Election Commisioner");
      b3=new JButton("EXIT");
      b4=new JButton("INFO");
      ic=new ImageIcon("C:\\Users\\OM SAI
RAM\\Desktop\\project_pics\\Democracy_quote.jpg");
      j=new JLabel(ic);

   }

   public void launch()
   {
      j.setSize(400,400);
      f.setSize(400,400);
      f.setLocation(400, 200);
      f.setLayout(null);
      l.setBounds(150, 100, 200, 30);
```

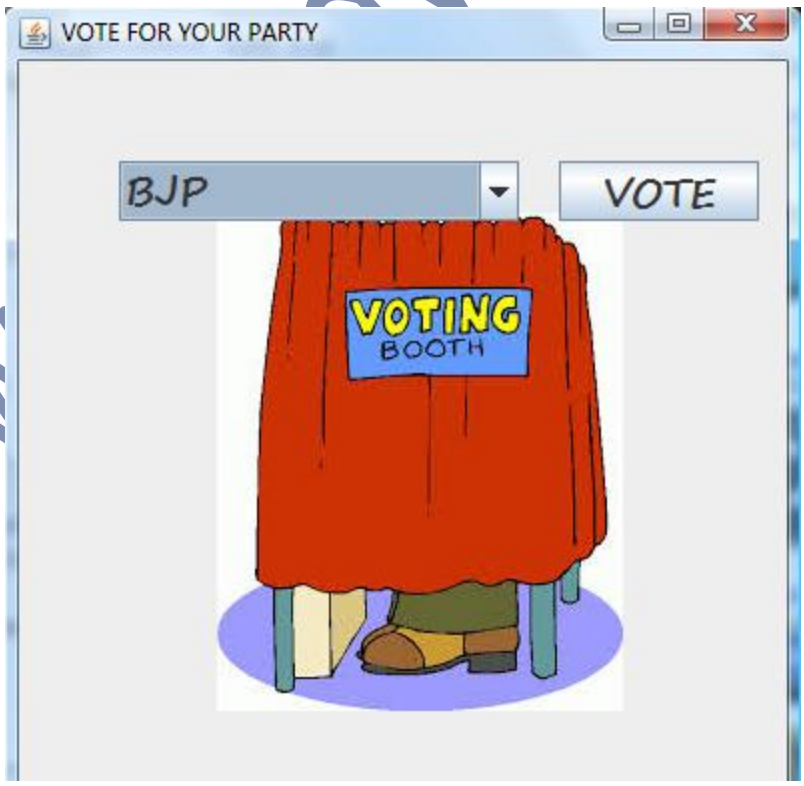
```
b1.setBounds(50, 150, 250, 30);
b1.addActionListener(this);
b2.setBounds(50, 200,250, 30);
b2.addActionListener(this);
b3.setBounds(270,330, 100, 30);
b3.addActionListener(this);
b4.setBounds(150,330, 100, 30);
b4.addActionListener(this);
Font font = new Font("SEGOE PRINT", Font.BOLD,20);
l.setFont(font);
Color color=new Color(240,40,60);
l.setForeground(color);
b1.setFont(font);
b2.setFont(font);
b3.setFont(font);
b4.setFont(font);
f.add(j);
j.add(l);
j.add(b1);
j.add(b2);
j.add(b3);
j.add(b4);
f.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
try
{
        String path="jdbc:mysql://localhost/";
        String place="nitin";
        Class.forName("com.mysql.jdbc.Driver");
        Connection
con=DriverManager.getConnection(path+place,"niti","1234");
        Statement stmt=con.createStatement();
        ResultSet rs=stmt.executeQuery("Select count(*) from candidate");
        rs.next();
        count=rs.getInt(1);
        if(count==0)
```

```
            {
               b1.setEnabled(false);
            }
            else
            {
               b1.setEnabled(true);
            }
            f.setVisible(true);
            con.close();
      }
      catch(Exception ae)
      {
         JOptionPane.showMessageDialog(f,ae.getMessage());
      }

}

public static void main(String[] args)
{
   Project1 p=new Project1();
   p.launch();

}

@Override
public void actionPerformed(ActionEvent e)
{
  if((e.getSource().equals(b1)))
   {

      Voter v=new Voter();
      v.launch();
      f.dispose();

   }
```

```
        if(e.getSource().equals(b3))
        {
           f.dispose();
        }
         if(e.getSource().equals(b2))
         {
             Admin a=new Admin();
             a.launch();
             f.dispose();
         }
          if((e.getSource().equals(b4)))
        {

           Intro i=new Intro();
           i.launch();
           f.dispose();

        }
    }
}
```

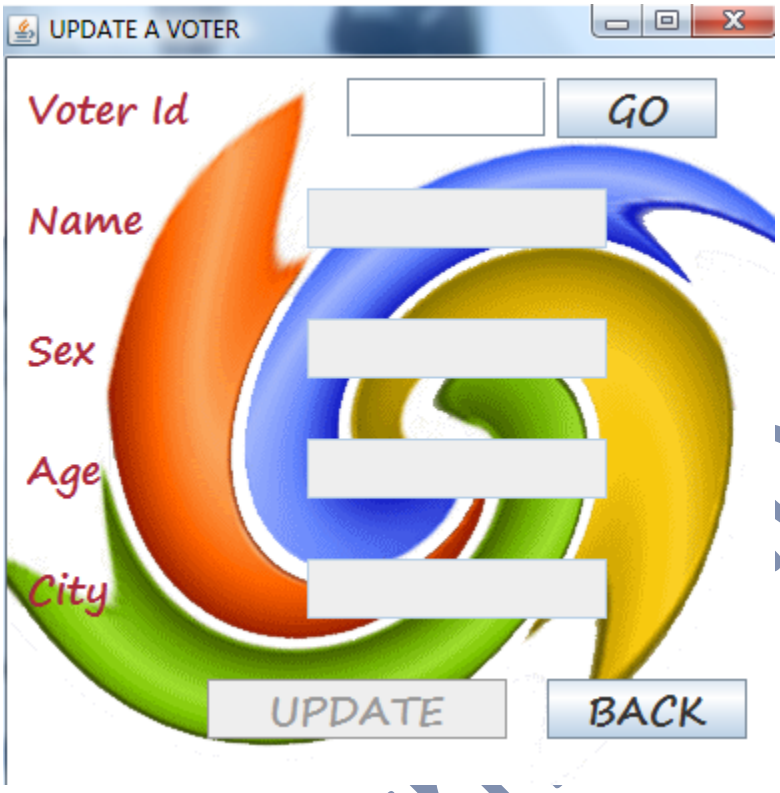


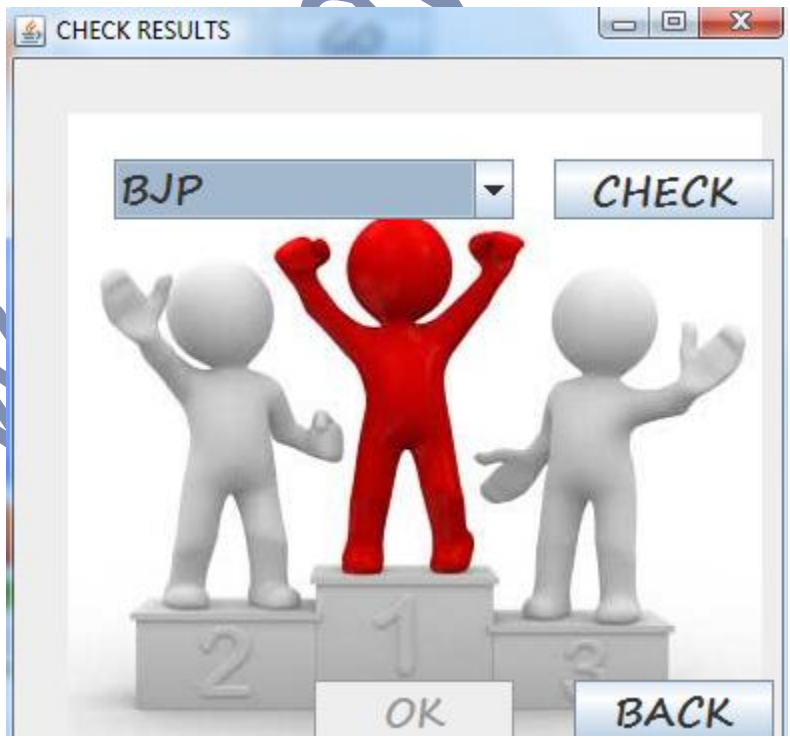





ADMINISTRATOR
Login
Username
Administrator
Password
OK
BACK


ACTIONS
WELCOME xyz
RESET VOTING
ADD CANDIDATES
UPDATE/DELETE CANDIDATE
ADD A VOTER
UPDATE A VOTER
CHECK RESULTS
<<BACK


UPDATE A VOTER
Voter Id
GO
Name
Sex
Age
City
UPDATE
BACK


CHECK RESULTS
BJP
CHECK
OK
BACK

Reference

- www.google.com
- www.wikipedia.com
- www.studymafia.org