### INTRA-DISCIPLINARY PROJECT-II REPORT

## "ONLINE VOTING"

### **Submitted**

by

Mr. Aradhyula Sri Krishna Teja 201FA04237 Mr. Ganipisetty Akash 201FA04233

Mr. Panchakarla Veda Pani 211LA04012

Under the guidance of

Ms. S. Radha Rani, Assistant Professor



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
VIGNAN'S FOUNDATION FOR SCIENCE, TECHNOLOGY AND
RESEARCH Deemed to be UNIVERSITY

#### Vadlamudi, Guntur.

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### **CERTIFICATE**

This is to certify that the Intra-Disciplinary Project-II entitled "ONLINE VOTING" that is being submitted by Aradhyula Sri Krishna Teja (201FA04237), Ganipisetty Akash (201FA04233), Panchakarla Veda Pani (211LA04012) for partial fulfilment of Intra-Disciplinary Project-II is a bonafide work carried out under the supervision of Ms. S. Radha Rani, Assistant Professor from Department of Computer Science & Engineering.

Ms. S. Radha Rani Assistant Professor Dr. Venkatesulu Dondeti HOD, CSE

**Internal Examiner** 

**External Examiner** 

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### **DECLARATION**

We hereby declare that the Intra-Disciplinary Project-II entitled "ONLINE VOTING" is being submitted by Aradhyula Sri Krishna Teja (201FA04237), Ganipisetty Akash (201FA04233), Panchakarla Veda Pani (211LA04012) in partial fulfilment of Intra-Disciplinary Projects-II course work. This is our original work, and this project has not formed the basis for the award of any degree. We have worked under the supervision of Ms. S. Radha Rani, Assistant Professor from Department of Computer Science & Engineering.

By

Aradhyula Sri Krishna Teja (201FA04237) Ganipisetty Akash (201FA04233) Panchakarla Veda Pani (211LA04012)

Date:

### **ABSTRACT**

The word "vote" means choosing from a list, electing, or determining. The main goal of voting is to come up with leaders of the people's choice in organisation

Some of the problems involved include ridging votes during the election, insecure or inaccessible polling stations, inadequate polling materials, and also inexperienced personnel.

Manual voting may lead to malpractices sometimes. so there is a need to implement an online voting system. This is to expand the technology from a manual voting system to a digital voting system. In this, our idea is to implement an online voting system with features like the schemes that the specific party has implemented, based on the features we are going to vote. The main reason we need to shift from a normal voting system to an online voting system is that we can consume our time and can vote from anywhere online

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#### Introduction

Nowadays every organization or college conducts an election once or twice a year. It is very difficult to conduct and manage the election traditionally and also a very time taking process. Before days there was a voting system with papers. Now, this electronic system has no need for ballot papers, etc. All the authorized and eligible persons can register online and can vote by logging into their own systems. It is not time-consuming for the users. The major advantage of this system is that the user has no need of coming to the voting halls, as they can vote from anywhere. It has more features compared to the normal voting system. In this way, most people can cast their votes without missing.

## **Objective**

The important objective of this paper is to develop an online voting system which is a need these days. The online system should satisfy the basic requirements like the software used should be trusted and secure. It will be a secure system because users can vote only once as the database will not accept more than one vote per user. This online voting system is very easy to use and it is very efficient. This system does not require much effort as compared to the normal voting system. Once the system is understandable to everyone then this will be the best form to vote.

## **Project Description**

This application is for the Online Voting system. There are three modules in this database Admins, Voters, and voting module.

#### Admin:

Using this application admin creates a unique ID and conducts elections of an organization. Admin has control over the database of elections. Admin decides the participants which will part in the election by their manifesto and nomination form. Results will be announced by the admin.

#### Voter:

Voter (organization members) registers the election using election ID which is created by the admin. By using the name, organization ID, phone number, Email address and create a strong password. On the participant's page, the participants fill out the

nomination form (designed by the admin) and give their manifesto file. By seeing

their nomination form and manifesto file admin decides the eligible participants.

Eligible participants can add their symbols.

Voting:

On the decided date and time online voting module opens. Using their election

ID, organization ID, and password they login into the module. They want to fill out

OTP which was sent to their mobile number. and submit their vote on the button

corresponding to the participant symbol that appears on the screen.

Software and hardware requirements specifications

**Hardware Requirements** 

• Processor Intel: core i5 Processor 2.4 GHz

Storage Required: 200 – 350 MB

RAM: 8GB RAM

Hard disk: 500 GB Hard Disk

**Software Requirements** 

Java Development Kit 18

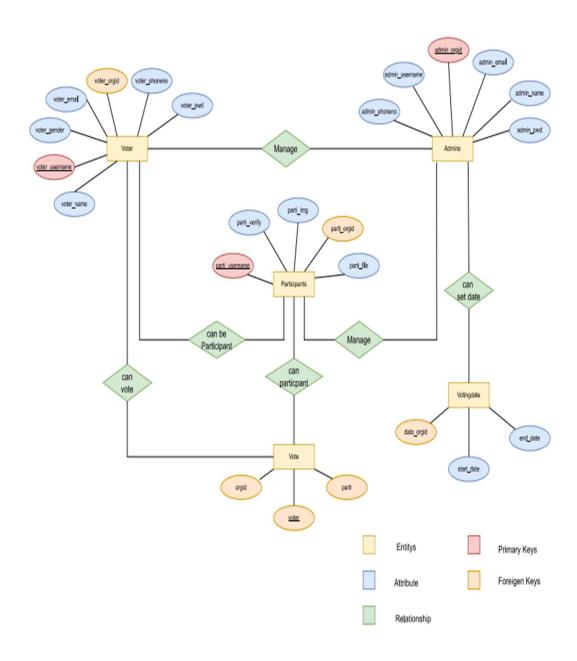
Tomcat Server 10.0

MYSOL Workbench 8.0

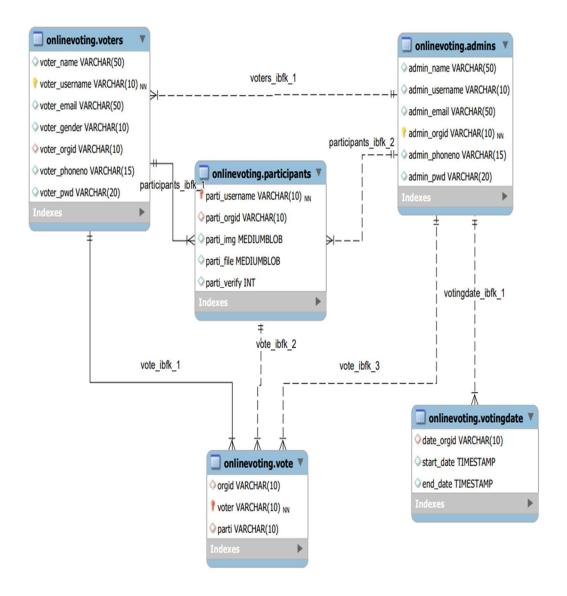
Apache NetBeans 13.0

MySQL Connector JDBC

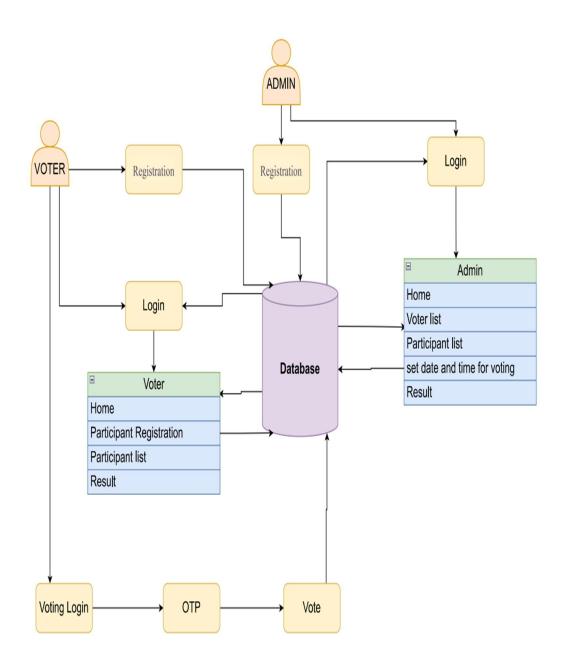
# **ER Diagram**



## **Database Schema**



# **System Architecture**



## **Implementation**

Sample Source Code:

#### Datetime.java

```
import java.io.*;
import jakarta.servlet.*;
import jakarta.servlet.http.*;
import java.sql.*;
public class Datetime extends HttpServlet {
  protected void doPost(HttpServletRequest request, HttpServletResponse
response)throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    PrintWriter out = response.getWriter();
    HttpSession session = request.getSession();
    String id = (String)session.getAttribute("id");
    session.setAttribute("id", id);
    String orgid = request.getParameter("orgid");
    if(orgid.equals(id)){
       String start= request.getParameter("start");
       String end = request.getParameter("end");
      Timestamp sqlstart = Timestamp.valueOf(start);
       Timestamp sqlend = Timestamp.valueOf(end);
         try{
       Class.forName("com.mysql.cj.jdbc.Driver");
       Connection
con=DriverManager.getConnection("jdbc:mysql://localhost:3306/onlinevoting","root"
,"abcd1234");
       Statement st=con.createStatement();
       ResultSet rs=st.executeQuery("select * from votingdate where
date orgid=""+orgid+""");
       if (rs.next()) {
         out.println("<script type=\"text/javascript\">");
         out.println("alert('orgid Already used');");
         out.println("</script>");
       }
       else{
       PreparedStatement ps=con.prepareStatement( "insert into votingdate
values(?,?,?)");
       ps.setString(1,orgid);
       ps.setTimestamp(2,sqlstart);
       ps.setTimestamp(3,sqlend);
```

```
int i = ps.executeUpdate();
      if(i>0){
         RequestDispatcher rd=request.getRequestDispatcher("/adminresult.jsp");
         rd.include(request, response);
         out.println("<script type=\"text/javascript\">");
         out.println("alert('successfully registered');");
         out.println("</script>");
      }
    }
    catch(Exception e){
    System.out.println("Error:"+e.getMessage());
    out.close();
    }
    else{
      RequestDispatcher rd=request.getRequestDispatcher("/adminresult.jsp");
         rd.include(request, response);
         out.println("<script type=\"text/javascript\">");
         out.println("alert('Worng Orgid');");
         out.println("</script>");
    }
  }
Otpsend.jsp
<%@page import="java.util.Random"%>
<%@page import="java.io.BufferedReader"%>
<%@page import ="java.io.IOException" %>
<%@page import="java.io.InputStreamReader"%>
<%@page import="java.net.URL"%>
<%@page import="java.net.URLConnection"%>
<%@page import="java.net.URLEncoder"%>
<%@ page import="java.sql.*"%>
<%@ page import = "java.io.*,java.util.*" %>
<%@ page import = "javax.servlet.*,java.text.*" %>
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
  pageEncoding="ISO-8859-1"%>
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
```

```
</head>
<body>
<%
String user=request.getParameter("user");
String orgid=request.getParameter("orgid");
session.setAttribute("user",user);
session.setAttribute("orgid",orgid);
try {
java.util.Date date = new java.util.Date();
java.sql.Timestamp current = new java.sql.Timestamp(date.getTime());
String s = "";
String e ="";
try {
  String phone="";
  Class.forName("com.mysql.cj.jdbc.Driver");
  Connection
con=DriverManager.getConnection("jdbc:mysql://localhost:3306/onlinevoting","root"
,"abcd1234");
  Statement stmt=con.createStatement();
  Statement stmt1=con.createStatement();
  Statement stmt2=con.createStatement();
  String query2="select * from votingdate where date orgid="+orgid+"";
  ResultSet rs2=stmt.executeQuery(query2);
  if (rs2.next()){
    s=rs2.getString(2);
    e=rs2.getString(3);
  }
  System.out.println("s "+s);
  System.out.println("e "+e);
  //Timestamp
                                  start
                                                                               new
Timestamp(DateUtil.provideDateFormat().parse(s).getTime());
  //Timestamp
                                  end
                                                                               new
Timestamp(DateUtil.provideDateFormat().parse(e).getTime());
  Timestamp start = Timestamp.valueOf(s);
  Timestamp end = Timestamp.valueOf(e);
  /*java.util.Date sdate = new SimpleDateFormat("YYYY-MM-DD").parse(s);
  java.sql.Timestamp start = new java.sql.Timestamp(sdate.getTime());
  java.util.Date edate = new SimpleDateFormat("YYYY-MM-DD").parse(e);
  java.sql.Timestamp end =new java.sql.Timestamp(edate.getTime());*/
```

<title>Insert title here</title>

```
System.out.println("current "+current);
  System.out.println("start "+start);
  System.out.println("end "+end);
  if((current.before(start))||(current.after(end)) )
    out.println("<script type=\"text/javascript\">");
    out.println("alert('Voting is not started yet or completed');");
    out.println("</script>");
    RequestDispatcher rd1=request.getRequestDispatcher("/");
    rd1 .include(request, response);
  }
  else{
  String query="select * from vote where voter="+user+"";
  ResultSet rs=stmt2.executeQuery(query);
  if(rs.next())
    out.println("<script type=\"text/javascript\">");
    out.println("alert('This participant already voted');");
    out.println("</script>");
    RequestDispatcher rd=request.getRequestDispatcher("/");
    rd.include(request, response);
  }
  else{
  System.out.println("OTP");
              query1="select
                                   voter phoneno
                                                        from
                                                                  voters
                                                                               where
voter username=""+user+"" ";
  ResultSet rs1=stmt1.executeQuery(query1);
  if(rs1.next()){
  phone=rs1.getString(1);
  System.out.println(phone);
  String mobiles = phone;
  Random rand = new Random();
  int otp = rand.nextInt(900000) + 1000000;
  session.setAttribute("otp",otp);
  String senderId = "ABCDEF";
  String message = "Your OTP is "+otp;
  String route="4";
  URLConnection myURLConnection=null;
  URL myURL=null;
  BufferedReader reader=null;
  String encoded message=URLEncoder.encode(message);
```

```
String
                     mainUrl="https://2factor.in/API/V1/0d45a91c-f553-11ec-9c12-
0200cd936042/SMS/";
  StringBuilder sbPostData= new StringBuilder(mainUrl);
  sbPostData.append("/"+phone);
  sbPostData.append("/"+otp);
  mainUrl = sbPostData.toString();
  try
    //prepare connection
    myURL = new URL(mainUrl);
    myURLConnection = myURL.openConnection();
    myURLConnection.connect();
    reader=
                                   new
                                                               BufferedReader(new
InputStreamReader(myURLConnection.getInputStream()));
    String success="Your message sent sucessfully";
    response.sendRedirect("otp.jsp");
    //finally close connection
    reader.close();
  }catch (Exception e1){
       e1.printStackTrace();
  }catch (Exception e2) {
  e2.printStackTrace();
  } catch (Exception e3) {
  e3.printStackTrace();
  %>
</body>
</html>
Image Upload
import java.io.*;
import jakarta.servlet.*;
import jakarta.servlet.http.*;
import jakarta.servlet.annotation.*;
import java.sql.*;
@MultipartConfig(maxFileSize = 16177216)
```

```
public class Participant extends HttpServlet {
   @Override
  protected void doPost(HttpServletRequest request, HttpServletResponse response)throws
ServletException, IOException, NumberFormatException {
    response.setContentType("text/html");
    PrintWriter out = response.getWriter();
    String username=request.getParameter("user");
    String orgid = request.getParameter("orgid");
    Part image = request.getPart("img");
    Part file = request.getPart("file");
    System.out.println(image);
    System.out.println(file);
    HttpSession session = request.getSession();
    String id = (String)session.getAttribute("id");
    String user= (String)session.getAttribute("user");
    int verify=0;
    try{
       Class.forName("com.mysql.cj.jdbc.Driver");
       Connection
con=DriverManager.getConnection("jdbc:mysql://localhost:3306/onlinevoting", "root", "abcd1
234");
       PreparedStatement
                              ps=con.prepareStatement(
                                                              "insert
                                                                         into
                                                                                  participants
values(?,?,?,?)");
       InputStream inputfile =file.getInputStream();
       InputStream inputing =image.getInputStream();
       ps.setString(1,username);
       ps.setString(2,orgid);
       ps.setBlob(3, inputimg);
       ps.setBlob(4, inputfile);
       ps.setInt(5, verify);
       int i = ps.executeUpdate();
       if(i>0){
          RequestDispatcher rd=request.getRequestDispatcher("/voter part Reg.jsp");
         rd.include(request, response);
         out.println("<script type=\"text/javascript\">");
          out.println("alert('successfully registered');");
          out.println("</script>");
       }
    catch(Exception e){
     System.out.println("Error:"+e.getMessage());
    out.close();
}
```

```
Imgview.jsp
<%@ page import="java.sql.*"%>
<%@ page import="java.io.*"%>
<%
String username = request.getParameter("username");
Blob image = null;
byte[] imgData = null;
Statement stmt = null;
ResultSet rs = null;
try {
  Class.forName("com.mysql.cj.jdbc.Driver");
  Connection
con=DriverManager.getConnection("jdbc:mysql://localhost:3306/onlinevoting","root","abcd1
234");
  stmt = con.createStatement();
              stmt.executeQuery("select
                                            parti img
                                                          from
                                                                    participants
                                                                                    where
parti username=""+username+"" ");
  while (rs.next()) {
  image = rs.getBlob(1);
  imgData = image.getBytes(1,(int)image.length());
  }
  response.setContentType("image/jpg");
  OutputStream o = response.getOutputStream();
  o.write(imgData);
  o.flush();
  o.close();
  catch (SQLException e) {
  e.printStackTrace();
  }
%>
```

## Sample Database

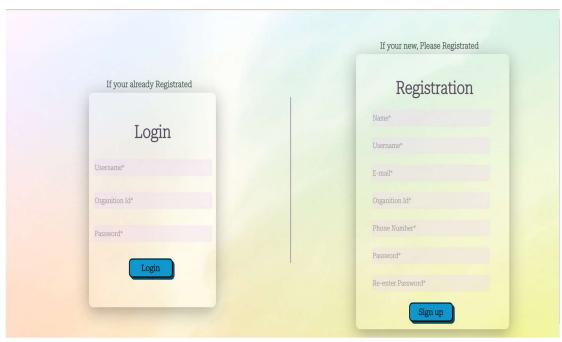
```
create table admins(
admin name varchar(50),
admin username varchar(10) unique,
admin email varchar(50) unique,
admin orgid varchar(10) primarykey,
admin phoneno varchar(15) unique,
admin pwd varchar(20) unique;
create table voters(
voter name varchar(50),
voter username varchar(10) primarykey,
voter email varchar(50) unique,
voter gender varchar(10),
voter orgid varchar(10),
voter phoneno varchar(15) unique,
voter pwd varchar(20),
foreign key(voter orgid) references admins(admin orgid)
on update cascade on delete cascade);
create table participants(
parti username varchar(10) unique primarykey(,
parti orgid varchar(10),
parti img mediumblob,
parti file mediumblob,
parti verify int,
,foreign key(parti username) references voters(voter username) on update cascade on delete
cascade,
foreign key(parti orgid) references admins(admin orgid)on update cascade on delete
cascade);
create table votingdate(
date orgid varchar(10),
start date TIMESTAMP,
end date TIMESTAMP,
foreign key(date orgid) references admins(admin orgid)on update cascade on delete
cascade);
create table vote(
orgid varchar(10),
voter varchar(10) primary key,
parti varchar(10),
foreign key(voter) references voters(voter username)on update cascade on delete cascade,
foreign key(parti) references participants(parti username)on update cascade on delete
cascade,
foreign key(orgid) references admins(admin orgid)on update cascade on delete cascade);
```

## **Results**

## Home



# Login/Registration



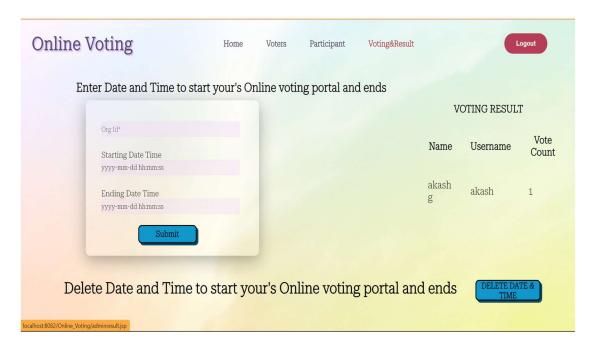
# Voter List in Admin Page

S.no	Name	UserName	Gender	E-mail	Phone Number
1	akash g	akash	Male	akashganipisettyakash@gmail.com	8639235020
2	Harsha	harsha	Male	harsha2002@gmail.com	9014501678
3	vedha phani	phani	Male	panchakarlavedapani@gmail.com	6303449631
4	Krishna teja	teja	Male	srikrishnateja2002@gmail.com	8309029335
5	vishnu kausik	vishnu	Male	chvkausik@gmail.com	6305725283
6	Yaseen shaik	yaseen	Male	yaseenshaik251219@gmail.com	9014501029

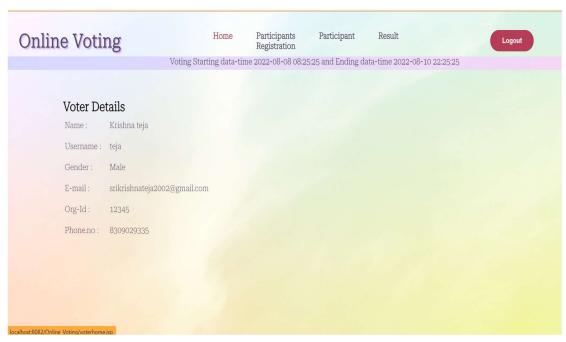
# Partticipant List



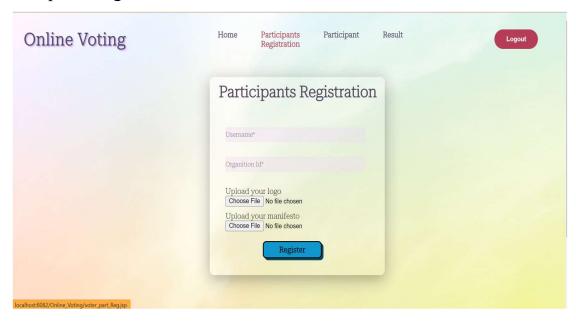
## Votin Date&Time seting and Result



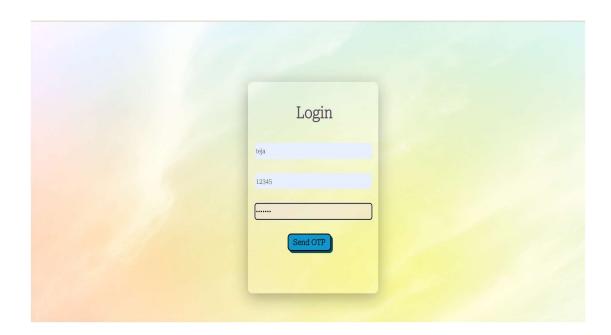
## Voter Page



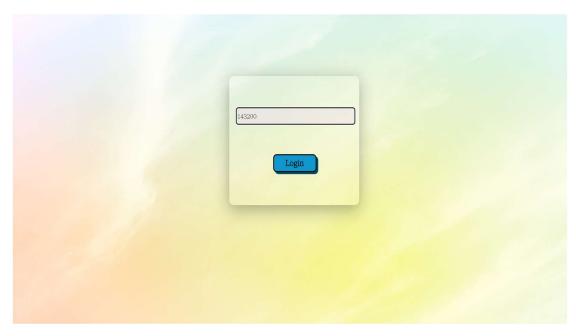
# Partipants Registration



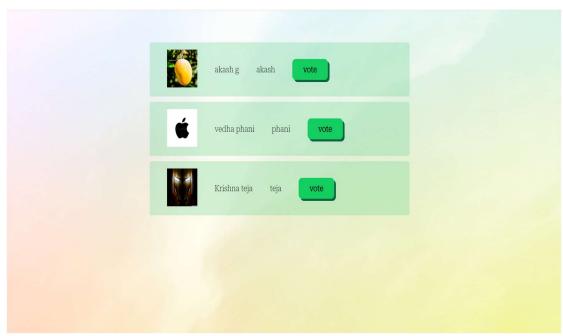
# Voting Page Login



# OTP



# Voting Page



## **Conclusion**

The Online Voting Platform offers clever tickets, brilliant agenda highlights, vote counting, classification and revealing. By using Online Voting and Election Management system it help to conduct And Manage Election easy and efficient in any organization or colleges, compare to traditionally. And is reduced workload as well as time.

## References

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- Rabinadnan kishor,"Implementation of cloud for online election system",International journal of advance research in computer science and management studies,vol.3, March 2015.
- Ramya Govindaraj, Kumaresan P, K.Sree harshitha,"Online Voting System using Cloud" 2020 International Conference on Emerging Trends in Information Technology and Engineering (ic-ETITE)