JAVA PROGRAMMING LAB MINI PROJECT

**(CA 3307)**

**TOPIC –- E-VOTING SYSTEM**



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E-VOTING SYSTEM

E-Voting System is a project in JAVA where a candidate can give online on this portal. Candidates competing for elections are registered on this system and by entering aadhar number and some details, candidates can give their vote.

import java.util.\*;

class Candidate {

private String candName;

private String candDistrict;

private String party;

private ArrayList<String> votes;

public String getCandName() {

return candName;

}

public String getCandDistrict() {

return candDistrict;

}

public String getParty() {

return party;

}

public int getVotes() {

return votes.size();

}

public Candidate(String candName, String candDistrict, String party) {

this.candName = candName;

this.candDistrict = candDistrict;

this.party = party;

this.votes = new ArrayList<>();

}

public void voteCandidate(String adhar) {

if(this.votes.contains(adhar)) {

System.out.println("SAME CANDIDATE CANNOT VOTE MULTIPLE TIMES");

} else {

this.votes.add(adhar);

System.out.println("SUCCESSFULLY VOTED ");

}

}

}

class Candidates {

public static Scanner s = new Scanner(System.in);

private static ArrayList<Candidate> candList = new ArrayList<>();

public void addCandidate() {

System.out.println("PROVIDE FULLNAME");

String fullName = s.nextLine();

System.out.println("PROVIDE DISTRICT NAME ");

String district = s.nextLine();

System.out.println("PROVIDE PARTY NAME");

String party = s.nextLine();

Candidate c = new Candidate(fullName,district,party);

this.candList.add(c);

}

public void getCandidates() {

int num = 1;

System.out.println("CANDIDATES");

for(Candidate v : this.candList) {

System.out.println("\n------------------\n");

System.out.println("ID : "+num++);

System.out.println("CANDIDATE NAME : "+v.getCandName());

System.out.println("DISTRICT : "+v.getCandDistrict());

System.out.println("PARTY : "+v.getParty());

System.out.println("TOTAL VOTES : "+v.getVotes());

System.out.println("\n------------------\n");

}

}

public void deleteCandidate() {

int num = 1;

System.out.println("CANDIDATES");

for(Candidate v : this.candList) {

System.out.println("ID : "+num++);

System.out.println("CANDIDATE NAME : "+v.getCandName());

System.out.println("PARTY : "+v.getParty());

System.out.println("\n\*\*\*\*\*\n");

}

System.out.println("CHOOSE CANDIDATE ID TO DELETE : ");

int id = s.nextInt();

id--;

candList.remove(id);

System.out.println("CANDIDTAE REMOVED SUCCESSFULLY ");

}

public void vote(String adhar) {

int num = 1;

System.out.println("CANDIDATES");

for(Candidate v : this.candList) {

System.out.println("ID : "+num++);

System.out.println("CANDIDATE NAME : "+v.getCandName());

System.out.println("PARTY : "+v.getParty());

System.out.println("\n\*\*\*\*\*\*\n");

}

System.out.println("CHOOSE CANDIDATE ID TO VOTE : ");

int id = s.nextInt();

id--;

candList.get(id).voteCandidate(adhar);

}

}

class Voter {

private String adharNumber;

private String fullName;

private String district;

public String getAdharNumber() {

return adharNumber;

}

public String getFullName() {

return fullName;

}

public String getDistrict() {

return district;

}

public Voter(String adharNumber, String fullName, String district) {

this.adharNumber = adharNumber;

this.fullName = fullName;

this.district = district;

}

}

class Voters {

public static Scanner s = new Scanner(System.in);

private static ArrayList<Voter> jojo = new ArrayList<>();

public void addVoter() {

System.out.println("PROVIDE ADHAAR NUMBER");

String adhar = s.nextLine();

for(Voter v : this.jojo) {

if(v.getAdharNumber().compareTo(adhar)==0) {

System.out.println("USER HAS ALREADY REGISTERED");

return;

}

}

System.out.println("PROVIDE FULLNAME");

String fullName = s.nextLine();

System.out.println("PROVIDE DISTRICT");

String district = s.nextLine();

Voter v = new Voter(adhar,fullName,district);

this.jojo.add(v);

}

public void getVoters() {

int num = 1;

System.out.println("VOTERS");

for(Voter v : this.jojo) {

System.out.println("ID : "+num++);

System.out.println("ADHAAR NUMBER : "+v.getAdharNumber());

System.out.println("VOTER NAME : "+v.getFullName());

System.out.println("DISTRICT : "+v.getDistrict());

System.out.println("\_\_\_\_\_\_\_");

}

}

public Boolean Login(String adhar) {

for(Voter v : this.jojo) {

if(v.getAdharNumber().compareTo(adhar) == 0) {

return true;

}

}

return false;

}

}

class Jojo {

public static Scanner s = new Scanner(System.in);

static Voters v = new Voters();

static Candidates c = new Candidates();

public static void mainContent() {

int opt = 0;

while(opt!=4) {

try {

System.out.println("\n\nWELCOME TO E-VOTING SYSTEM \n");

System.out.println("1.VOTER LOGIN");

System.out.println("2.ADMIN LOGIN");

System.out.println("3.VOTER REGISTER");

System.out.println("4.EXIT");

System.out.print("\nENTER YOUR CHOICE : ");

opt = s.nextInt();

if(opt==2) {

System.out.println("PROVIDE ADMIN USERCODE : ");

s.nextLine();

String userName = s.nextLine();

System.out.println("PROVIDE ADMIN PASSCODE : ");

String passCode = s.nextLine();

if(userName.compareTo("admin")==0 && passCode.compareTo("passcode")==0) {

int spt=0;

while(spt!=4) {

System.out.println("\nWELCOME ADMIN!\n");

System.out.println("\t1.ADD COMPETITORS ");

System.out.println("\t2.REMOVE COMPETITORS ");

System.out.println("\t3.VIEW VOTES: ");

System.out.println("\t4.EXIT: ");

System.out.print("\tENTER YOUR CHOICE : ");

spt = s.nextInt();

if(spt==1) {

c.addCandidate();

}

if(spt==2) {

c.deleteCandidate();

}

if(spt==3) {

c.getCandidates();

}

}

} else {

System.out.print("\tAUTHENTICATION FAILED ");

}

}

if(opt == 1) {

System.out.println("PROVIDE YOUR ADHAR NUMBER : ");

s.nextLine();

String adharNumb = s.nextLine();

if(v.Login(adharNumb)) {

int spt = 0;

while(spt!=2) {

System.out.println("\n\_LOGIN SUCCESS\_\n");

System.out.println("\t1.VOTE ");

System.out.println("\t2.EXIT: ");

System.out.print("\tENTER YOUR CHOICE : ");

spt = s.nextInt();

if(spt==1) {

c.vote(adharNumb);

}

}

} else {

System.out.println("CREDENTIALS NOT RECOGNISED BY OUR

INTERNAL SYSTEM");

`

}

}

if(opt == 3) {

v.addVoter();

}

} catch (Exception e) {

System.out.println("PLEASE PROVIDE VALID INPUT!");

continue;

}

}

System.out.print("THANK YOU FOR USING OUR SERVICE");

}

public static void main(String[] args) {

mainContent();

}

}