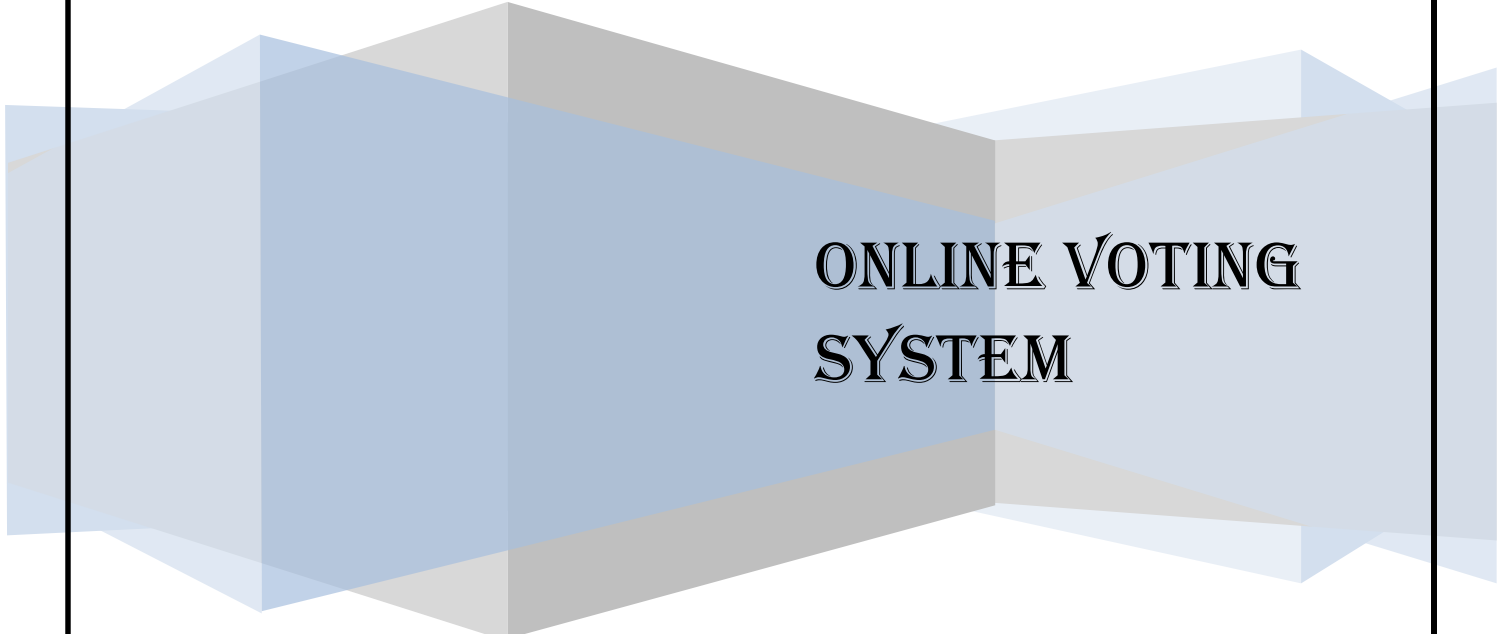# WEBTECHNOLOGY PROJECT

SUBMITTED BY

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ONLINE VOTING SYSTEM

Introduction:

This project is about "Atheneum online voting system"using JAVA language. Online voting system are software platforms used to securely conduct votes and elections.As a digital platform they eliminate the need to cast your votes using paper or having to gather in person. The forms are created using java swing and the contents are stored in the database and it is retrieved using JDBC connectivity(mysql).

Concepts used:

JDBC(Java Database Connectivity):

JDBC is an application programming interface(API) for the programming language Java,which defines how a client may access a database.
It is part of the Java Standard Edition platform,from Oracle Corporation.it allows multiple implementations to exist and be used by the same application.

Java Swings:

Swing is a GUI widget toolkit for JAVA. It is a part of Oracle's Java Foundation Classes(JFC) - an API for providing a graphical user interface(GUI).

Unlike AWT components,Swing components are not implemented by platform-specific code.Instead,they are written entirely in java and therefore are platform-independent.

PREREQUISITE:
- Eclipse IDE
- JDBC connectivity
- Java Swing
- Mysql-xampp

First we have to start the mysql in xampp control panel:
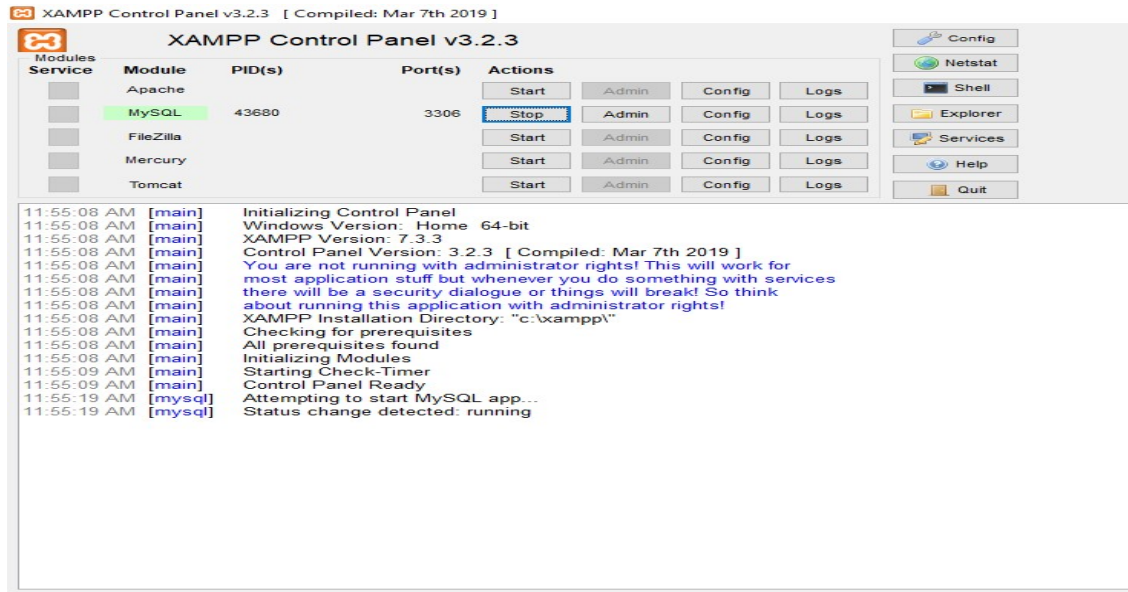
And then,we have to create database named "voting " and then you have to create tables for that database.The table names are:

- extrainfo
- personal
- users
- voters
- voteslist

➢ admin

The 'admin status' alone should be inserted as "stop"(voting system should me stopped until admin starts it).

```
MariaDB [voting]> desc admin;
+--------+-------------+------+-----+---------+-------+
| Field  | Type        | Null | Key | Default | Extra |
+--------+-------------+------+-----+---------+-------+
| status | varchar(10) | YES  |     | NULL    |       |
+--------+-------------+------+-----+---------+-------+
1 row in set (0.082 sec)

MariaDB [voting]> desc extrainfo;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| regno       | int(10)     | YES  |     | NULL    |       |
| dept        | varchar(20) | YES  |     | NULL    |       |
| designation | varchar(20) | YES  |     | NULL    |       |
| username    | varchar(20) | YES  |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
4 rows in set (0.010 sec)

MariaDB [voting]> desc personal;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| username    | varchar(20) | YES  |     | NULL    |       |
| password    | varchar(20) | YES  |     | NULL    |       |
| firstname   | varchar(20) | YES  |     | NULL    |       |
| lastname    | varchar(20) | YES  |     | NULL    |       |
| age         | int(10)     | YES  |     | NULL    |       |
| designation | varchar(20) | YES  |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
6 rows in set (0.010 sec)

MariaDB [voting]> desc users;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| username    | varchar(20) | YES  |     | NULL    |       |
| password    | varchar(20) | YES  |     | NULL    |       |
| designation | varchar(20) | YES  |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
3 rows in set (0.010 sec)
```

```
MariaDB [voting]> desc voters;
+--------+-------------+------+-----+---------+-------+
| Field  | Type        | Null | Key | Default | Extra |
+--------+-------------+------+-----+---------+-------+
| name   | varchar(20) | YES  |     | NULL    |       |
| status | varchar(20) | YES  |     | NULL    |       |
+--------+-------------+------+-----+---------+-------+
2 rows in set (0.010 sec)

MariaDB [voting]> desc voteslist;
+-----------+-------------+------+-----+---------+-------+
| Field     | Type        | Null | Key | Default | Extra |
+-----------+-------------+------+-----+---------+-------+
| candidate | varchar(20) | YES  |     | NULL    |       |
| votes     | int(10)     | YES  |     | NULL    |       |
+-----------+-------------+------+-----+---------+-------+
2 rows in set (0.048 sec)

MariaDB [voting]> insert into admin(status) values('stop');
Query OK, 1 row affected (0.247 sec)

MariaDB [voting]> select * from admin;
+--------+
| status |
+--------+
| stop   |
+--------+
1 row in set (0.001 sec)

MariaDB [voting]>
```
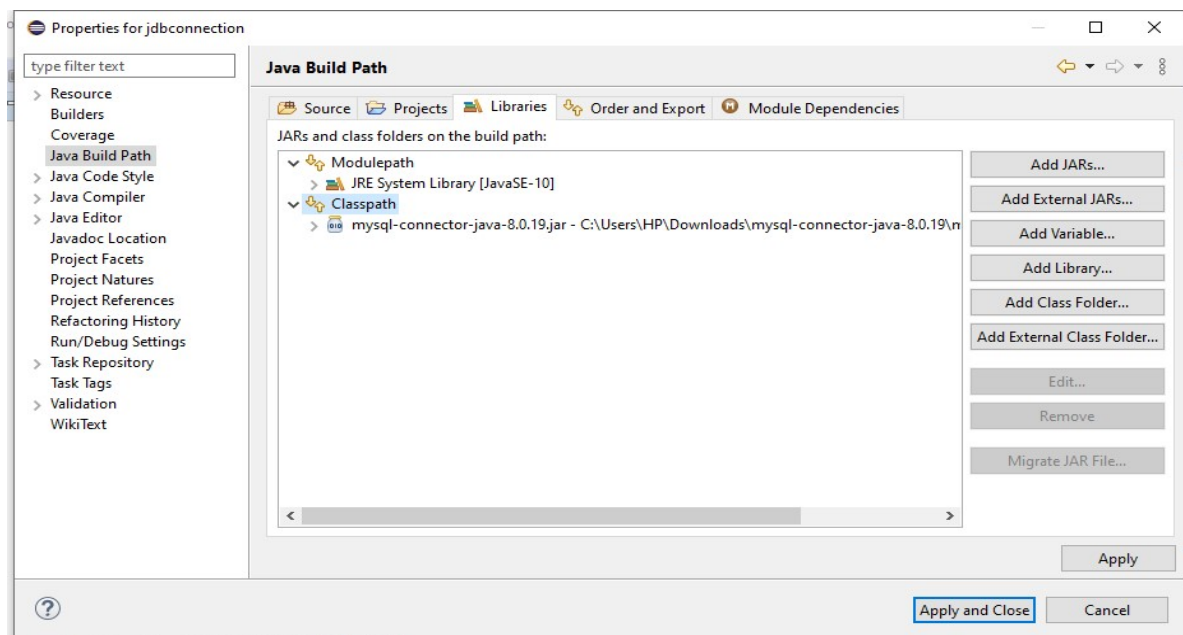
In eclipse , the project name is _VOTING_.In this we have nine classes,the class names are:

1. admin
2. candidate
3. candidatelogin
4. database
5. login
6. signup
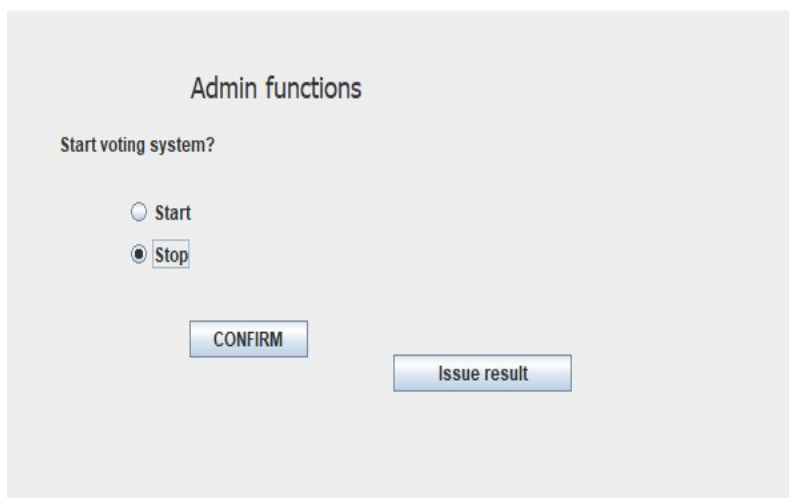7. validate
8. voter
9. voterlogin

JDBC connectivity:

Add the external JARs of mysql connector in the build path.

Admin:

The admin should start the voting system in the required time.Until that voters and candidates can signup in the portal and they can't login.

Admin functions

Start voting system?

- ○ Start
- ⦿ Stop

CONFIRM

Issue result

When the voting system should 'start' the admin should start it until that it will be as 'stop'.

LOGIN:

The user should signup before login.Only after starting the voting system only user can login it.Click the signup button for signup.

SIGNUP:

The voter or candidate should enter all the details for signup.

The user should enter his/her details and designation can be selected as voter or candidate.

If any one of the details is not entered it will pop a alert message.

The validation of every detail is checked.Age should be greater than or equal to 18.

SIGNUP FORM

USERNAME   Abinaya

PASSWORD   ●●●●●●

Confirm passw...   ●●●●●

FIRSTNAME   Abinaya

LASTNAME   Narayan

AGE   16

designation   voter ▼

Message   ✕

ⓘ   username should contain 1 uppercase one lowercase and a digit of length 8

OK

SIGNUP

SIGNUP FORM

USERNAME   Abinaya

PASSWORD   ●●●●●●

Confirm passw...   ●●●●●

FIRSTNAME   Abinaya

LASTNAME   Narayan

AGE   16

designation   voter ▼

Message   ✕

ⓘ   password should contain 1 uppercase one lowercase and any one special chararcter and a digit of length 8

OK

SIGNUP FORM

FIRSTNAME   Abinaya

USERNAME   Abinaya   LASTNAME   Narayan

PASSWORD   ••••••   AGE   16

Confirm passw...   •••••   designation   voter ▼

Message   ✕

ⓘ   password not matches

OK

SIGNUP

SIGNUP FORM

FIRSTNAME   Abinaya

USERNAME   Abinaya   LASTNAME   Narayan

PASSWORD   ••••••   AGE   16

Confirm passw...   •••••   designation   voter ▼

Message   ✕

ⓘ   age is less than 18

OK

SIGNUP

After entering the valid details click the signup button.

VOTER DETAILS:

It goes to voter details

VOTER DETAILS

CHOOSE	student ▼
DEPT	IT ▼
REGNO(if teacher enter ur ID number)	[ ]

Submit

If any not entered ,Alert message pops up…

VOTER DETAILS

CHOOSE   student ▼

DEPT

Message   ✕

ⓘ   enter info

OK

REGNO(if teacher enter ur ID numb

Submit

And click the submit button.
The details will be stored in the database.

If username is already taken it shows the alert message.

Database:

```
MariaDB [voting]> select * from users;
+-----------+----------+-------------+
| username  | password | designation |
+-----------+----------+-------------+
| Abinaya19 | Abi@2000 | voter       |
| Narayana10| Nara@1975| voter       |
| Buvana18  | Buva@1971| voter       |
| nandhini15| nandy@A1 | voter       |
| seetha189 | Seetha@13| voter       |
| Abishek19 | Abi@2000 | candidate   |
| Seetha19  | Seetha@13| candidate   |
+-----------+----------+-------------+
7 rows in set (0.00 sec)

MariaDB [voting]> select * from extrainfo
    -> ;
+-----------+------+------------+------------+
| regno     | dept | designaton | username   |
+-----------+------+------------+------------+
| 2018506004| IT   | student    | Abinaya19  |
| 2018506054| IT   | student    | Narayana10 |
|     32465 | IT   | teacher    | Buvana18   |
| 2018506069| IT   | student    | nandhini15 |
|      5485 | IT   | teacher    | seetha189  |
| 2018503064| IT   | student    | Abishek19  |
| 2018506140| IT   | student    | Seetha19   |
+-----------+------+------------+------------+
7 rows in set (0.00 sec)

MariaDB [voting]> select * from personal;
+-----------+----------+-------------+----------+-----+-------------+
| username  | password | firstname   | lastname | age | designation |
+-----------+----------+-------------+----------+-----+-------------+
| Abinaya19 | Abi@2000 | Abinaya     | Narayan  | 19  | voter       |
| Narayana10| Nara@1975| narayana    | moorthy  | 20  | voter       |
| Buvana18  | Buva@1971| buvaneswari | moorthy  | 40  | voter       |
| nandhini15| nandy@A1 | nandhini    | priya    | 21  | voter       |
| seetha189 | Seetha@13| ram         | arjun    | 39  | voter       |
| Abishek19 | Abi@2000 | abishek     | kumar    | 21  | candidate   |
| Seetha19  | Seetha@13| Seetha      | lakshmi  | 21  | candidate   |
+-----------+----------+-------------+----------+-----+-------------+
7 rows in set (0.00 sec)

MariaDB [voting]> _
```

```
MariaDB [voting]> select * from voters;
+-----------+-------------+
| name      | status      |
+-----------+-------------+
| Abinaya19 | notcompleted|
| Narayana10| notcompleted|
| Buvana18  | notcompleted|
| nandhini15| notcompleted|
| seetha189 | notcompleted|
+-----------+-------------+
5 rows in set (0.00 sec)

MariaDB [voting]> select * from voteslist;
+-----------+-------+
| candidate | votes |
+-----------+-------+
| Abishek19 |     0 |
| Seetha19  |     0 |
+-----------+-------+
2 rows in set (0.00 sec)

MariaDB [voting]> _
```
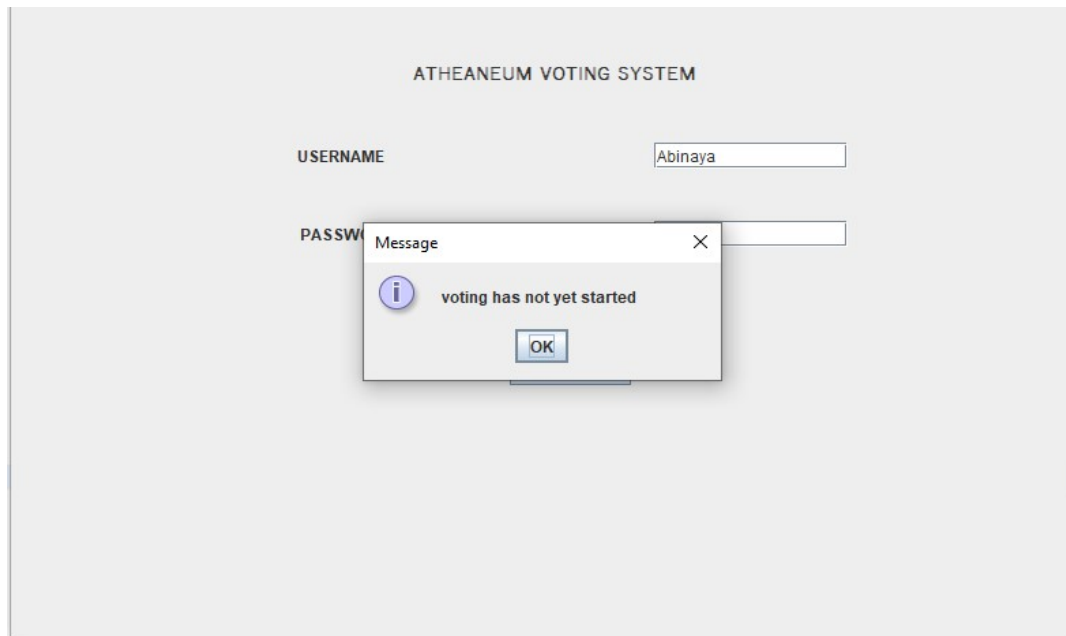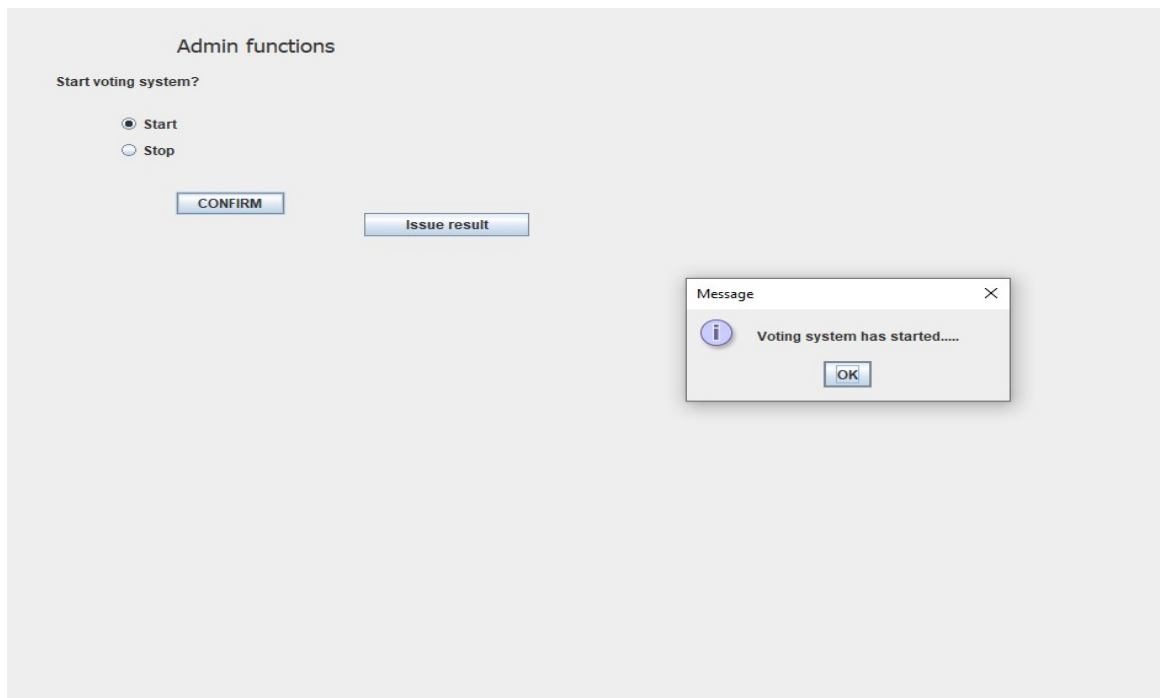
Voters status will be 'not completed' until they vote ,If they voted,it changes to 'completed'.

The candidates votes will be initially 0,when voting gets started it will incremented based on votes.

If any user try to login before admin starts the voting system,it shows the error message.

Now lets start the voting system.

Now login into the voting system,if username and password not matches it shows the error message.

ATHEANEUM VOTING SYSTEM

USERNAME   abi

Message   X

(i)   wrong username or password .dont have account signup it

OK

ATHEANEUM VOTING SYSTEM

USERNAME   Abinaya19
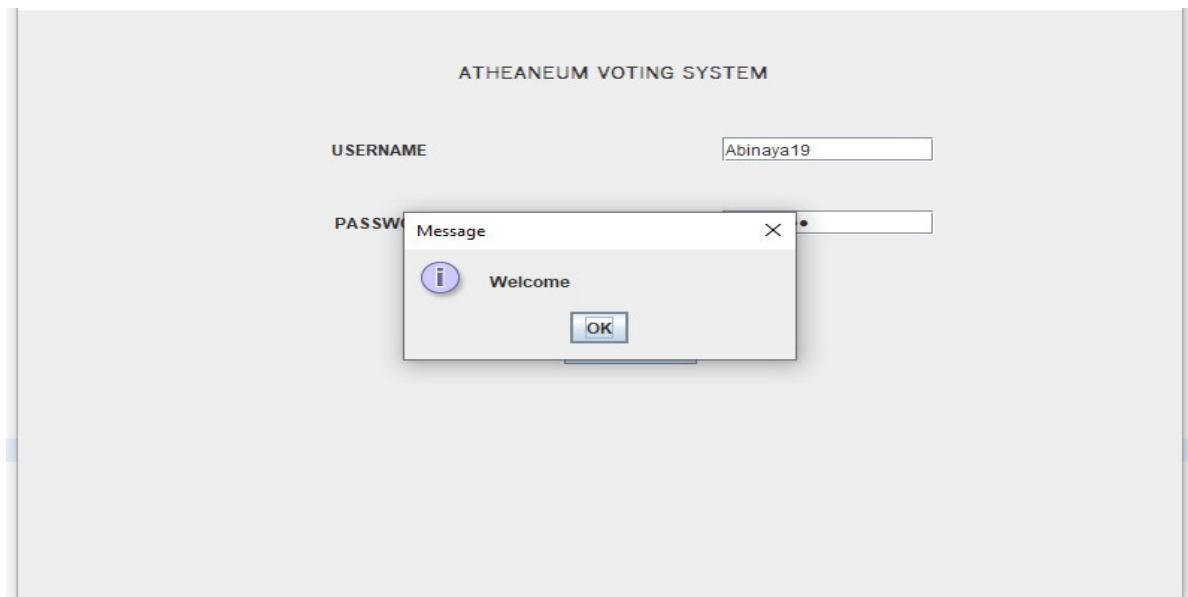
PASSWORD   ••••••••

LOGIN

SIGNUP

After login,it goes to voter portal and there we can select a candidate.

If no candidate selected ,it pops up the alert message.

VOTER PORTAL

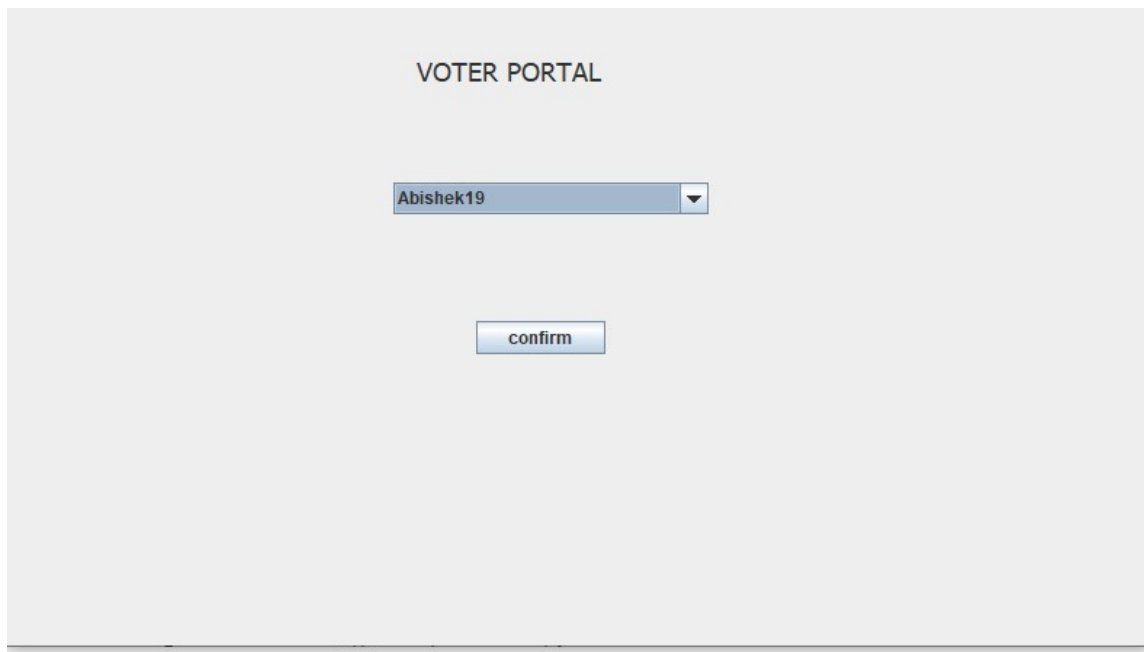select a candidate ▾

Message ✕

ⓘ   pls select a candidate

OK

VOTER PORTAL

select a candidate ▾

select a candidate
Abishek19
Seetha19

confirm

VOTER PORTAL

Abishek19

confirm

After selecting a candidate click the confirm button.


```
Command Prompt - mysql  -u root

MariaDB [voting]> select * from voters;
+-----------+--------------+
| name      | status       |
+-----------+--------------+
| Abinaya19 | completed    |
| Narayana10| completed    |
| Buvana18  | completed    |
| nandhini15| completed    |
| seetha189 | notcompleted |
+-----------+--------------+
5 rows in set (0.00 sec)

MariaDB [voting]> select * from voteslist;
+-----------+-------+
| candidate | votes |
+-----------+-------+
| Abishek19 |     3 |
| Seetha19  |     1 |
+-----------+-------+
2 rows in set (0.00 sec)

MariaDB [voting]> _
```

So in database the status of each voter will get changed to completed after voting.

The votes of each candidate gets incremented.
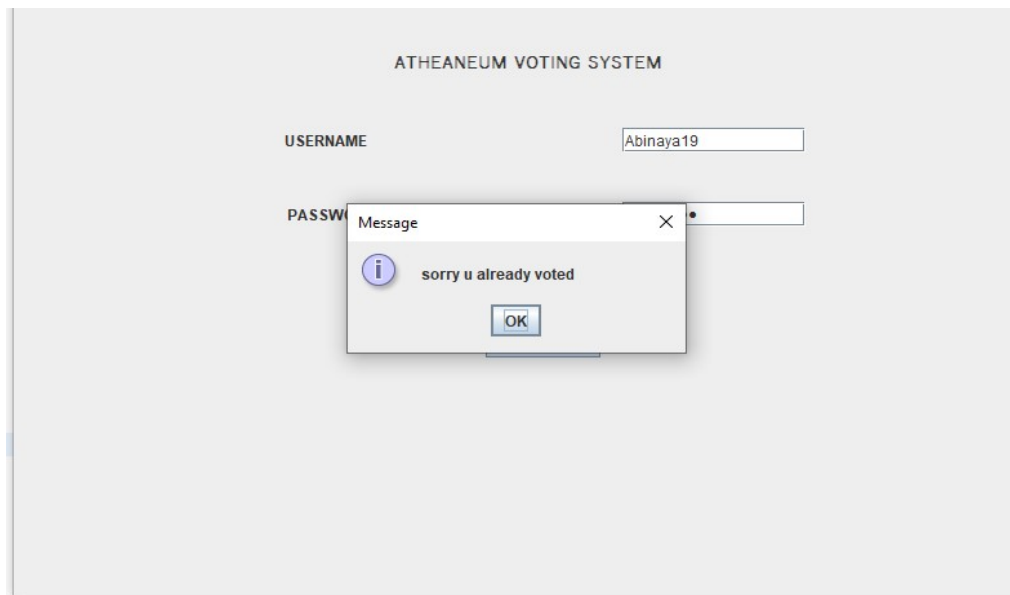
If any voter tries to relogin it gives the alert message.

The candidate can login and see their votes during voting.

So atlast if the voting time has finished the admin stops the voting system and issues the results.

Admin functions

Start voting system?

○ Start
◉ Stop

CONFIRM

Issue result

```
votes    candidate
4=Abishek19
1=Seetha19
Winner: Abishek19
```

Conclusion:

The Online voting system project has done succefully with Java language.