

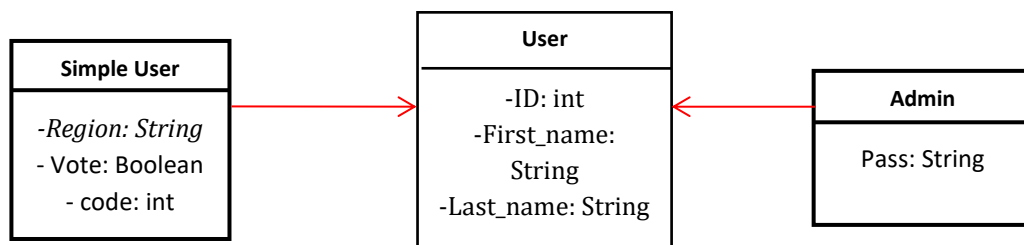
## I. Introduction:

- This is a Java application of an Election Management system
- It consists of 4 tables as follows: Admin, Candidate, Users, Votes.
- It contains 5 java interfaces as follows: Login, Menu [for the admin to choose whether to manage candidate &/or manage user], Election [where the simple user can vote] , Create\_List[contains the list of simple users and admins for the admin to view] and Stat[for the statistical results].
- The file “png” contains all icons used in the project.

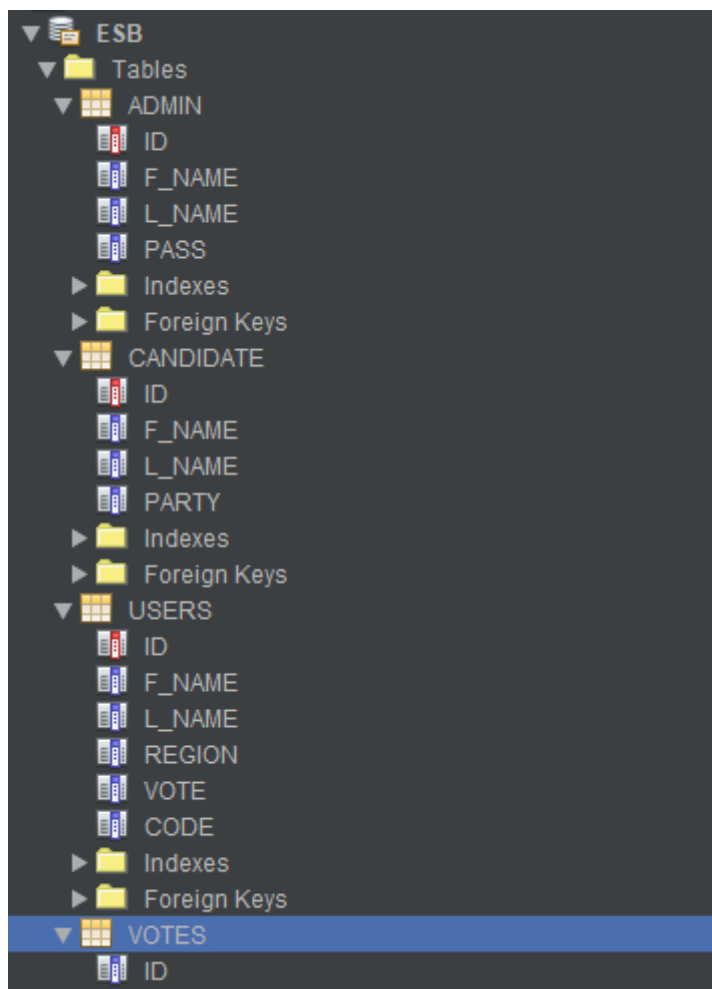
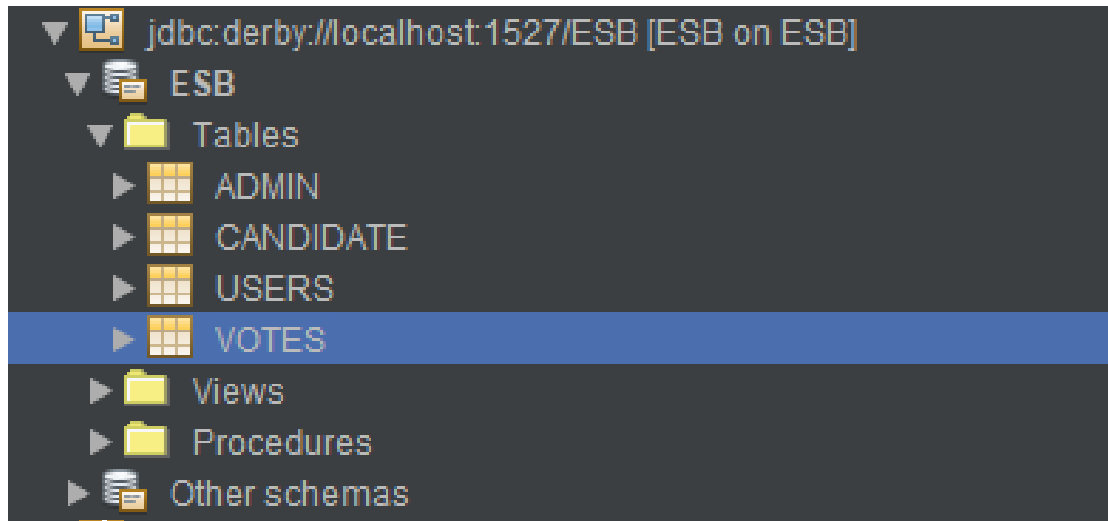
## II. The Conceptual Schema:

- **Users** (ID, First name, last name)
- **Admin** (ID, first\_name, last\_name, pass)
- **Simple\_User** (ID, First\_name, last\_name, region,vote,code)

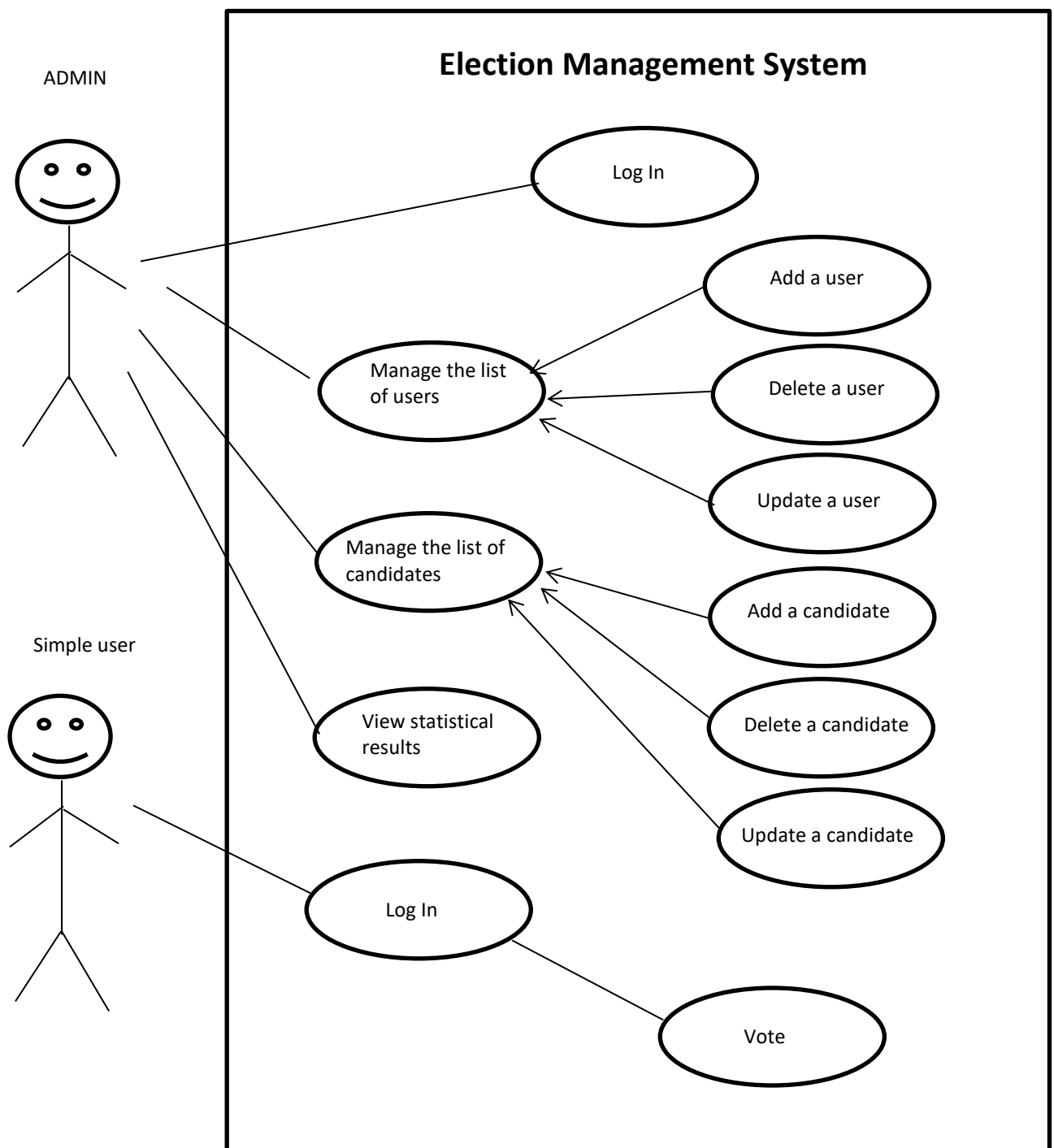
### Class diagram



### III. Data base :

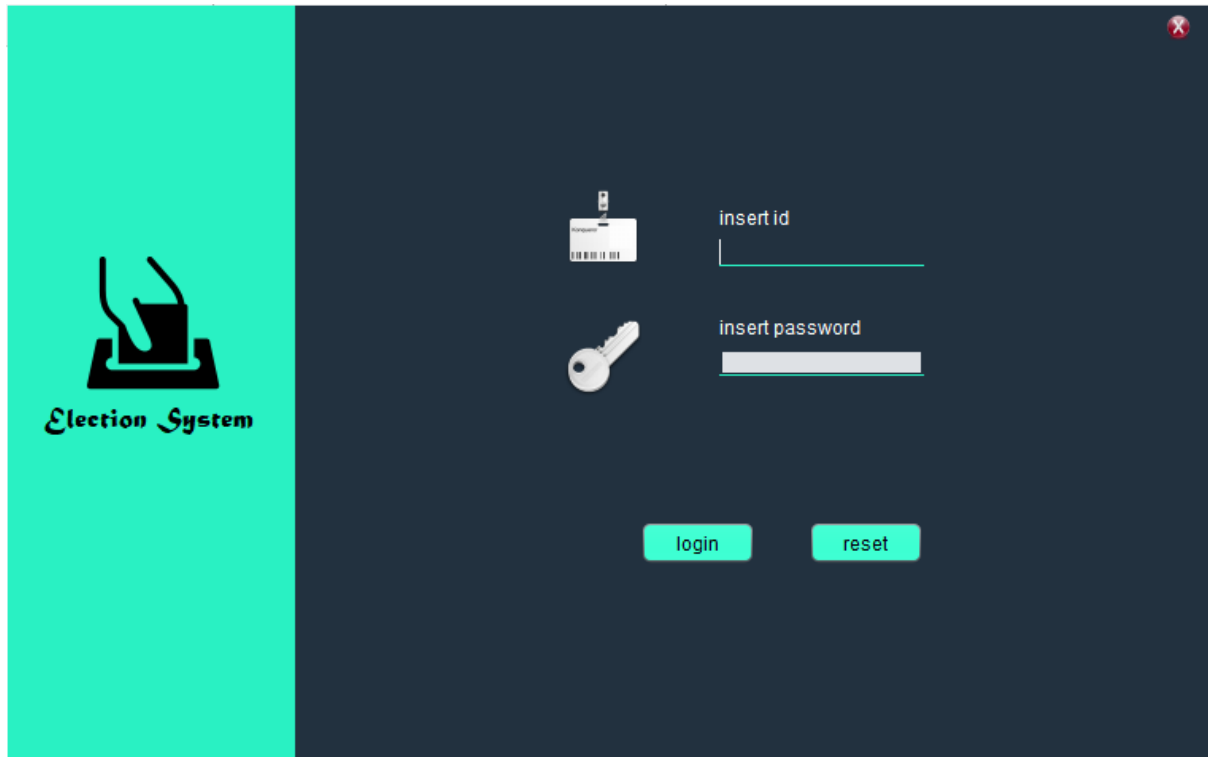


#### IV. Use case Diagram



## V. Screenshots for steps

### 1. Login:



### Description

This is the first page to be shown to the user/admin.

If the ID entered belongs to an **admin** then the password field will be **enabled** for him just by moving the mouse out of the id text field, and if the ID entered belongs to a **simple user** than the password field will stay **disabled** (as it is initially disabled).

*Error messages will be shown when:*

- The ID doesn't belong to neither an admin nor user.
- A wrong password is entered.

## 2. Menu: Manage Users Part

ID	First Name	Last Name	Region	Vote	code
7226834	ahmed	ben ali	safax	false	5611
7226835	adem	ben ali	zaghouane	false	2065
1580390	oussema	sassi	zaghouane	false	7934
4	ahmed	ben ali	safax	false	4

### Description:

Once **an admin** logs in, this page will be generated.

If he chooses to manage the users this window will be shown.

An admin can **insert, update or delete** a user.

The button “**refresh**” will allow the admin to refresh the table containing the users each time he changes something.

The button “**restart votes**” will allow the admin to delete all the votes in the DB. Clicking on a row containing a user will **automatically fill the** fields with the corresponding information about the user as shown below [to facilitate the update].

The “**generate code**” button generates a security code for the user so that no other person can use his ID to vote.

The “**search**” field allows the admin to search for any user in the user table using any attribute.

If the admin clicks on “**stats**” (top right) the **stat** interface will be shown (it will be explained later on).

If the admin clicks on “**list**” (top right) the **Create List** interface will be shown (it will be explained later on).

If the admin clicks on “**log out**” (top right) then he will go back to the **login page**.

*Error messages will be shown when:*

- A wrong ID is entered when updating or deleting
- An existing ID is entered when inserting (it might exist in the table users or admins)

### 3. Menu: Manage Candidates Part

ID	First Name	Last Name	party
1	rached	ghanouchi	nahdha
2	youssef	echahed	tahya tounis
3	hamadi	jbeli	wahdou

#### Description:

If the admin chooses to manage the candidates this window will be shown. An admin can **insert, update or delete** a candidate.

The button “**refresh**” will allow the admin to refresh the table containing the candidates each time he changes something.

Clicking on a row containing a user will **automatically fill the** fields with the corresponding information about the user as shown below [to facilitate the update].

***Error** messages will be shown when:*

- A wrong ID is entered when updating or deleting
- An existing ID is entered when inserting

## 4. Election:

The screenshot shows a web application interface for managing candidates. At the top right, there are links for 'stats', 'list', and 'log out'. Below these are two tabs: 'manage users' and 'manage candidate', with the latter being active. The form contains four input fields: 'id' (with value 3), 'first name' (with value hamadi), 'last name' (with value jbeli), and 'party' (with value nahdha). To the right of these fields are four buttons: 'insert', 'update', 'delete', and 'refresh'. Below the form is a table with the following data:

ID	First Name	Last Name	party
1	rached	ghanouchi	nahdha
2	youssef	echahed	tahya tounis
3	hamadi	jbeli	nahdha

## Description:

If a **user** logs in this window will be shown.

A user sees the table containing the **list of candidates** and he has to **choose the ID** (which is retrieved automatically from the DB) of the candidate he wishes to vote for and **enter his voting code** that was generated previously when the admin added him to the list.

If the user clicks on vote a window will be shown for him to **confirm the vote** and then he will **log out automatically** and **won't be able to log in again**.

***Error** messages will be shown when:*

- A wrong voting code is entered

## 5. Create List:

The screenshot shows a web application window with a light blue header and a white body. The body contains a large text area with a list of users and admins, and a summary section on the right. The list is as follows:

```
[Simple user: id=7226834, first name=ahmed, last name=ben ali, region=safax  
, Simple user: id=7226835, first name=adem, last name=ben ali, region=zaghouane  
, Simple user: id=1580390, first name=oussema, last name=sassi, region=zaghouane  
, Simple user: id=4, first name=ahmed, last name=ben ali, region=safax  
, Admin: id=2, first name=nour, last name=sabbegh, pass=admin  
, Admin: id=3, first name=saief, last name=tisseou, pass=admin  
, Admin: id=1, first name=ahmed, last name=ben ali, pass=admin  
]
```

On the right side, there are two summary statistics:

- number of simple users: 4
- number of admins: 3

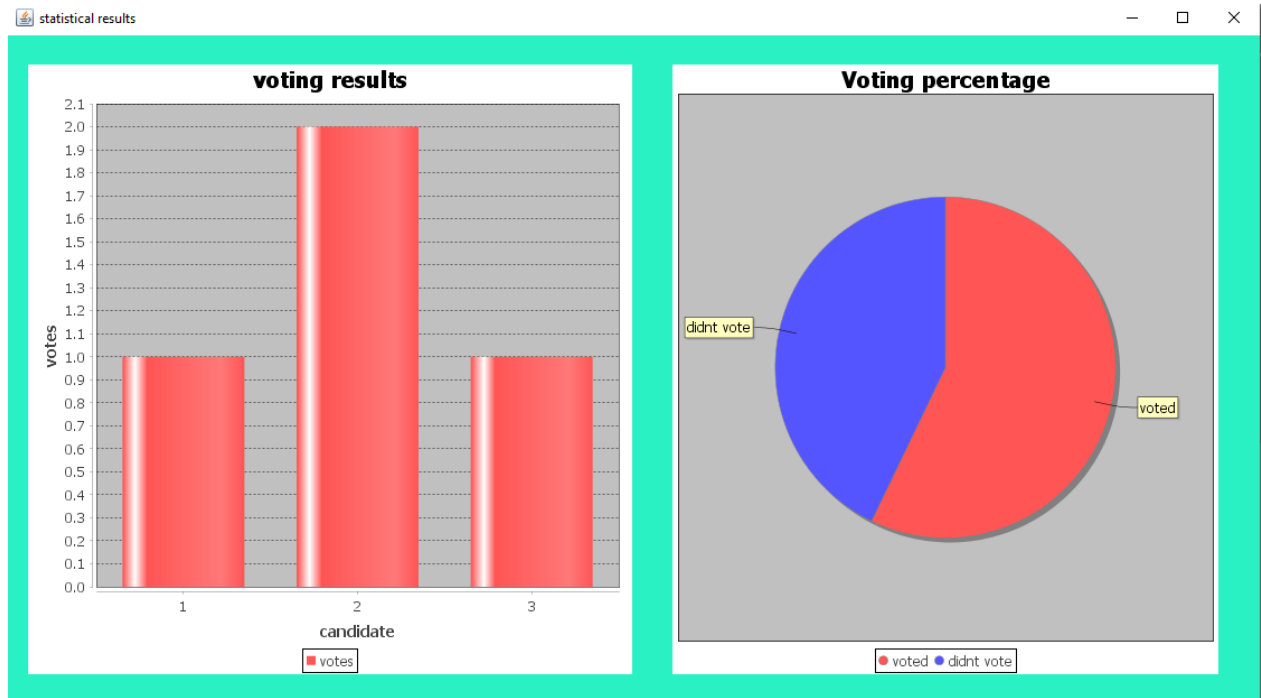
### Description:

This window will be shown if the admin clicks on “**list**” in the Menu interface.

A list of all the **users** and **admins** and **their attributes** will be shown. Number of simple users and admins is given ,and you can save the list to a text file predefined that can be used later for paper work or you can directly print it.



## 6. Stat:



### Description:

This window will be shown if the admin clicks on **“stats”** in the Menu interface.

A **Bar chart** will be shown, containing the results of the voting and the **percentages of votes** for each candidate at the left.

A **Pie chart** will shown, containing the **percentages of the users who voted** and those who didn't vote at the right.