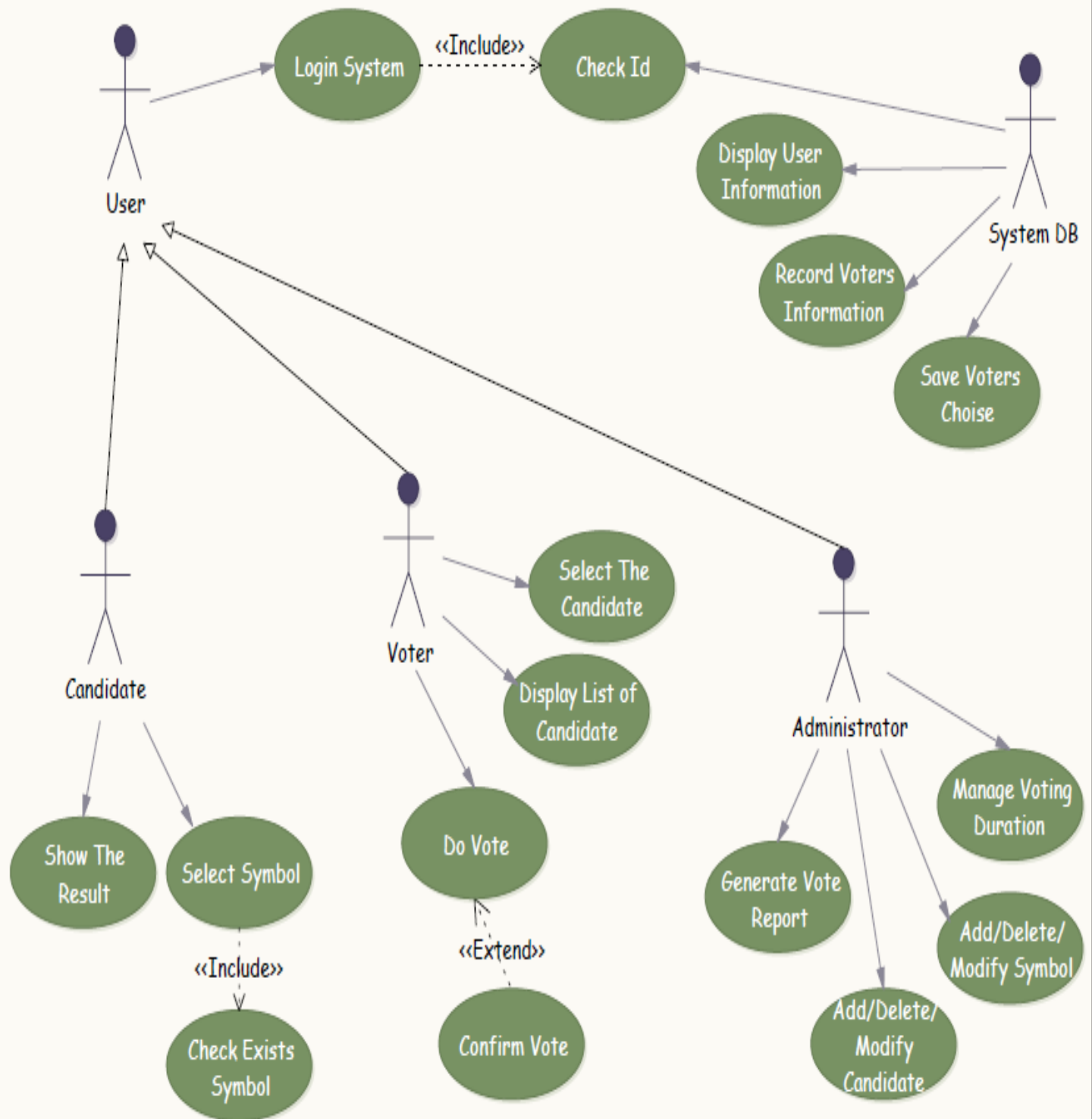


Election Management System



SRS Document

(47) – Election Management system

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Group Members and sections:

Team Member	seat number	department	Sections
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سارة محمد عبدالعال محمد	20191700852	CS	6
سندس محمد محمود محمد	20191700302	SC	2
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1. Introduction

The most popular methods of voting include: mail, online, in person or by phone. Of course, the most cost-effective option is **online voting**, as it is **less expensive** as it eliminates expensive printing and mailing costs, is **faster** and **easier** for users and the web is where most of your members now prefer to handle their personal business, which increases the likelihood of participation.

for the describe of system's functions , We have many functions that the system provides to all users, such as:

Login that allows the user to enter his own national number and verify it through the database to be able to enter the system as a voter, candidate or admin

Two functions that the **database system** performs, **Record Voters Information** that records voter information in the database . And also **Save Voters Choice**, which saves the choice of voters in the database after confirming their vote . Finally, **Display User Information**, which displays the data of all users who log in to the system

Then after logging in as a **voter**, he can choose 3 functions, the first **Display List of Candidate** Which shows him their information and symbols from which he will choose whom he wants, **Select The Candidate** He chooses from the list who he wants to nominate, **Vote**, which is to press the voting button after choosing the candidate , This function **includes Confirm Vote** function , which means that he confirms his choice to end the voting process

As for the **candidate**, he has 2 functions to perform, the **select symbol** , which is to choose his symbol through which the voters will choose, and this function **includes** checking the presence of the symbol **Check Exists Symbol** , Which makes sure that the Symbol you entered is available

Finally the **Administrator** Has 4 functions. The first is **Managing Voting Duration** Which is to determine the start and end time of the elections, And the admin is the one who adds, deletes or edits the candidates through Function **Add/Delete/Modify Candidate** And he can add, delete or modify candidate symbols through Function **Add/Delete/Modify Symbol** .Finally it **generates voting reports** that contain the final result of each candidate

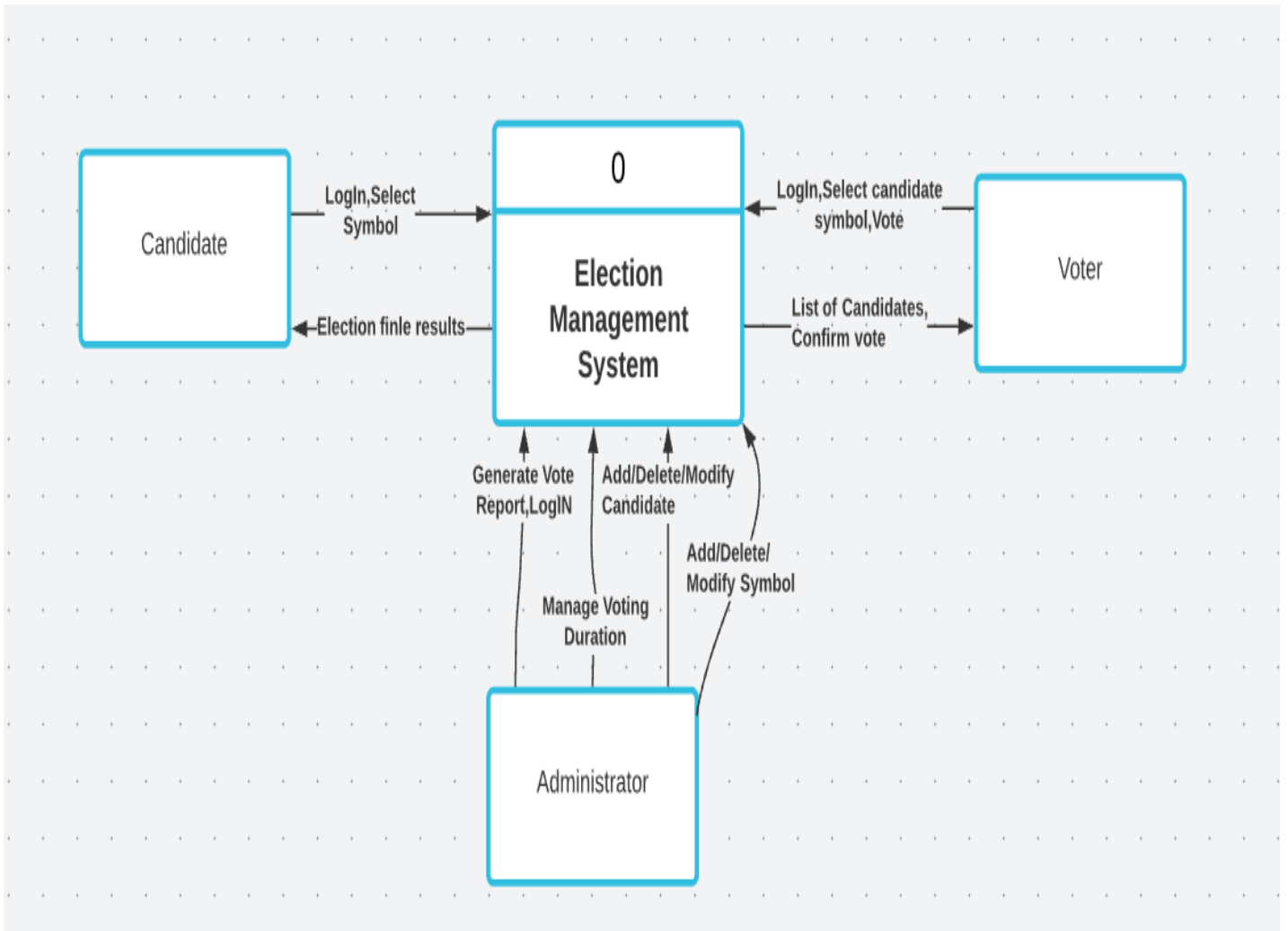
The electoral management system may benefit governments and systems in the field of politics and economics, as it may be used to appoint the prime minister or appoint any person who will have a position, as it helps us in these areas

For organizations with members, **elections** present an extraordinary opportunity to reconnect with constituents, and distribute important information to them. **Voting** is important because it gives your members a stake in your organization's success, while assuring them that their voice matters. It also creates a sense of community knowing that everyone is working toward a greater purpose.

Voting is also very important for members because contested board seats or certain measures, such as **voting** for a new union contract, for example, directly impacts their lives. Elections aren't frivolous exercises meant to appease the masses. These contests quite literally improve the lives of members and their families.

As mentioned previously, one of the easiest ways to encourage members to participate is to **simplify** the process. How do you accomplish that? Well, **online voting** may be the most surefire way of **increasing** turnout. **Thinking digital** is important, because people are spending significant portions of their days sifting through emails, replying to texts, and updating **social media**. Providing elections at their fingertips demonstrates that your group is investing in the future, while simultaneously making it much easier for members to vote.

2. Context Diagram



3. User Requirements

An election system in which the voter selects the candidate in a specified period of time by logging in, then choosing the candidate symbol and finally confirming his choice. When the time period expires, the system issues a report containing the election results.

- **User** : Each user displays his information after logging in
- **Voter** : He can display the list of candidates for the election which includes all the information about the candidates and this helps the voter to know the candidate he will choose in the elections, he can choose one of the candidates and cast his vote in the elections, and also there will be button to confirm his selection.
- **Candidate** : He can choose a symbol for himself. This will make the election easier for the voter to remember the symbol. Also, he can display the election results to know if he won the election or not.
- **Administrator** : He controls the duration of the elections to control the start and end of election, generate voting reports to show the election result, add/delete/modify symbols, and also add/delete/modify candidates.

4. Functional Requirements

Login :

- **Description** : User enter his / her National ID and check it in Database
- **Requirements** : National ID
- **Source** : User
- **Pre-condition** : Enter ID
- **Post-condition** : display user information
- **Output** : Login successfully

Display user information :

- **Description** : Display user information
- **Requirements** : User ID
- **Source** : Database
- **Pre-condition** : user login successfully

- **Post-condition** : Nothing
- **Output** : User information is displayed

Select symbol :

- **Description** : Select the candidate his / her own symbol for election
- **Requirements** : Display list of valid symbol
- **Source** : Candidate
- **Pre-condition** : Enter ID
- **Post-condition** : Update candidate's database with new symbol
- **Output** : Display candidate's information with the symbol

Save Voter choice :

- **Description** : Save the selection of the voter's choice in the database
- **Requirements** : The voter chooses the symbol
- **Source** : Database
- **Pre-condition** : The voter confirms the symbol
- **Post-condition** : Update the voter database with the selected symbol
- **Output** : Show symbols in voter information

Generate vote report :

- **Description** : Generate a report with final result
- **Requirements** : The end of the elections
- **Source** : Administrator
- **Pre-condition** : Voting time is end
- **Post-condition** : Nothing
- **Output** : Display the report with the winning candidate

5. Non-Functional Requirements

- **Useability** : The user shall be able to use the system easily after five minutes of reading the instructions.
- **Auditability** : The system shall be able to maintain an audit record that can be reviewed after the election.
- **Execution speed** : Reports generation process should not exceed 2 sec
- **Reliability** : Downtime (failure) of the system should not exceed 5 ms.
- **Security** : Users of the Election Management system shall authenticate themselves using their identity numbers.
- **Accessibility** : The Election Management system shall be available to all users During the election period.