# Requirements

## 

## Functional requirements:

Following are the features that the system shall have:

* When the user opens the application, he/she can either continue with previous election (by pressing 2) or start with a new election (by pressing 1).
* The main menu shall contain three options:

1. Option for the voter to cast his/her vote
2. Option for election administrator to view total number of votes obtained by each individual or leading candidate at that point of time.
3. Option to exit from the application.

* Each voter is provided with unique 4 digits voter-id. (ex: 1234, 1423,1324,2143,2314).
* Each voter is allowed to vote only one, further attempts to vote must be avoided.
* A voter must be allowed to cast his/her vote only if he/she enters his/her unique voter-id.
* The election administrator is also provided with unique 4 digits password (1723).
* The election administrator must enter valid password in-order to access options available for him/her. If he/she enters invalid password then access must be denied.
* The system must record the votes casted by voters for each candidate and display the results when accessed by the election administrator.
* If there is a tie between two or more candidates then the system must display that there is a tie.

## Non-functional requirements:

* The system shall provide the results of election in short amount of time (less than a minute).
* The overall cost of the system shall be less than that of traditional systems.
* The system must consume lesser power than traditional voting systems.
* The system should be secure from external software and hardware modifications which might lead to malfunctioning of the system.

## Software requirements:

1. A complier for compiling c code such as GNU GCC compiler, Borland etc.
2. An Ide such as code-blocks or visual studio or turbo c for executing the c code and provide user interface.

## Hardware requirements:

* A laptop or a desktop with modern processor and adequate storage apace.
* A well working keyboard to read inputs such as voter id, admin password and options from users.
* Any modern operating system (windows or linux or mac) installed.
* Power supply source and adapter.