

# Electronic Voting System

## REQUIREMENT SPECIFICATION

Project Code:	EVS-01
Project Name:	Electronic Voting System
Account:	
Vertical:	
Location:	ABC Development Center
Customer Name:	XYZ Automation Ltd.
Technical Manager/ Email ID:	
Project Manager / Email ID:	
Quality Co-ordinator / Email ID:	
Customer Contact Information:	

### 1.2 Table: UserProfile

The user specific details such as name, address, authentication and authorization / privileges should be kept in one or more tables, as necessary and applicable.

Field Name	Description
<i>UserID</i>	Customer ID is auto generated after registration and it is used as LoginID.
<i>Name</i>	Customer Name [first name & last name]
<i>DOB</i>	DOB of Customer
<i>Gender</i>	Gender of user [ Male / Female ]
<i>PresentAddress</i>	Present Address of Customer
<i>PermanentAddress</i>	Permanent Address of Customer
<i>PhoneNumber</i>	10 digit contact Number
<i>Emailid</i>	Email ID of the traveler

### 1.3 Table: UserCredentials

The table contains Authentication Information for Administrator, Electoral Officer and Voter

Field Name	Description
<i>UserType</i>	Administrator and Customer
<i>UserID</i>	User Identification, corresponding to UserProfile table
<i>Password</i>	Password
<i>LoginStatus</i>	Login status of the user

# Electronic Voting System

## 3.2 Administrator

The administrator as a user is defined to perform below listed operations after successful login.

ID	Objects	Operations	Data to include	Remarks
AD-001 to AD-003	Election	Add View	Election Name, State, Date, Constituency etc.	ElectionId should be auto generated on adding election details
AD-004 to AD-005	Party	Add View	Name, Leader, Symbol	Party symbol should be an image file PartyId should be auto generated
AD-006 to AD-007	Candidate	Add/Assign View	Name, Age, Address, Party, Constituency, Contact details etc.	CandidateId should be auto generated
AD-008	VoterRequest	View Approve	Name, Request Id, District, Constituency, voter-id, application status etc.	
AD-009	Candidate, Party	View	Candidate details and Party details	
AD-010	Election	Declare/Approve Results	Party details, Candidate details, No. of votes, etc	No. of votes to candidates and party details should be shown in ascending /descending order

## 3.3 Voter

The **Voter** as a user is defined to perform below listed operations after successful login.

ID	Objects	Operations	Data to include	Remarks
US-001	UserProfile	Register	Name, Date of Birth, Gender, Address, Mobile No District, etc.	UserId should be auto generated
US-002 to US-003	VoterRequest	Add View voter-id	UserId, Constituency etc.	User should be registered for a particular constituency only. VoterId should be auto generated
US-004	Schedule	View	Election, DateOfElection, etc.	Only upcoming elections to be visible
US-005	Candidate	View	Election details, Candidate Name, Party, etc	Election-wise candidates should be visible
US-006 to US-007	Election	Cast Vote View Result	ElectionId, Date, Candidate Name etc.	Results should be based on Election name, constituency and date

# Electronic Voting System

## 1. Introduction

### 1.1 Background

XYZ Automations Ltd focuses on automating various systems that have been working manually since years

### 1.2 Purpose

XYZ Automations Ltd has recently planned to develop "Electronic Voting System" - an application to automate the process of planning and managing the voting system, as well as the actual voting activity.

### 1.3 Scope

The scope of the Electronic Voting System (EVS) will be to provide the functionality as described in Functional Requirements document. The system will be developed on a Windows XP/Windows 7 machine using Java technology and Oracle database.

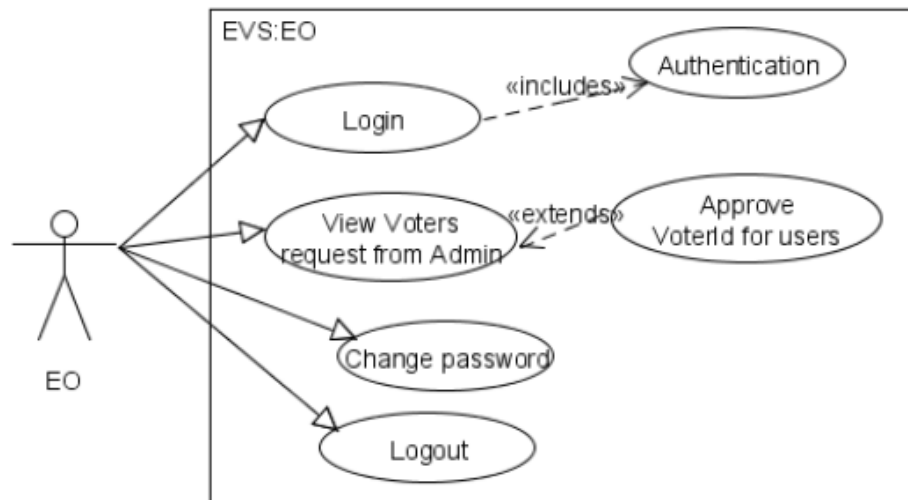
#### 1.4 Table: ElectionDetails

This table contains information related to the credit cards of the users used for making payments.

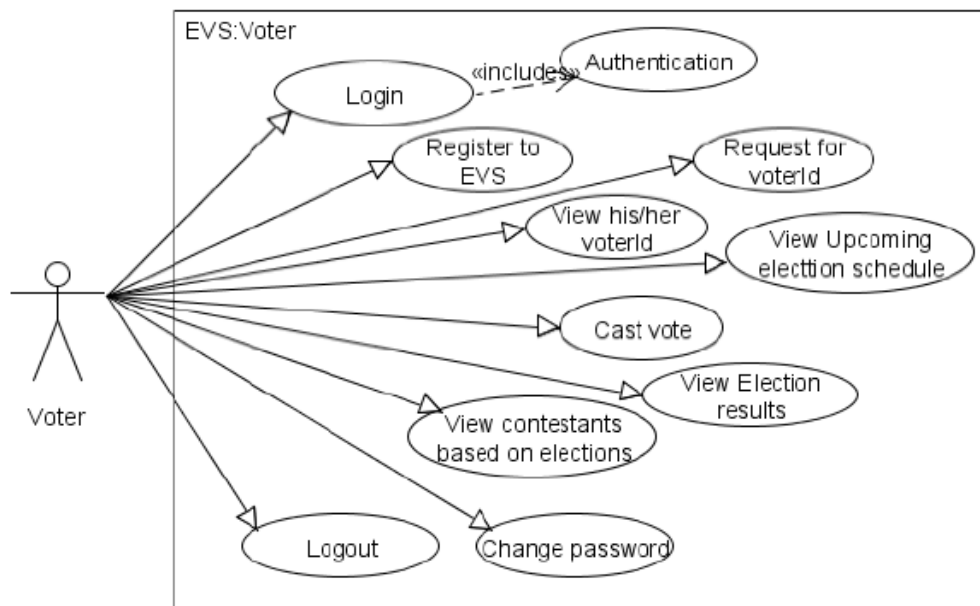
Field Name	Description
<i>Id</i>	Unique Id for the election
<i>Name</i>	Name for the election viz. Assembly Election - 2013
<i>Date</i>	Date of election
<i>District</i>	District of election
<i>Constituency</i>	Constituency of election
<i>CountingDate</i>	Date of counting votes and/or declaring results for the election

# Electronic Voting System

## 3.1.2 Use Case Diagram for Electoral Officer



## 3.1.3 Use Case Diagram for Voter

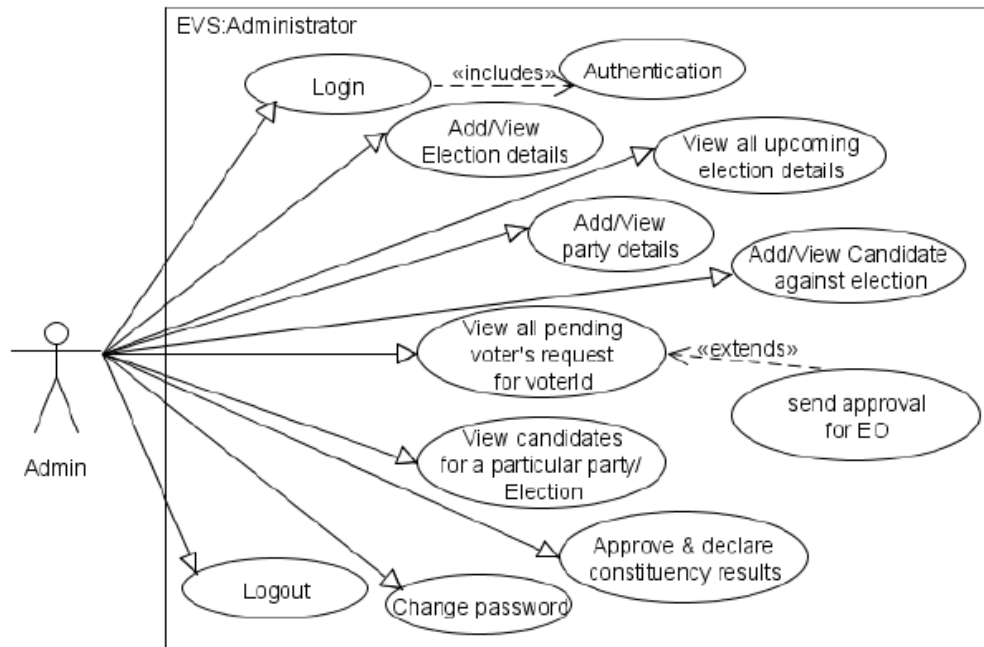


# Electronic Voting System

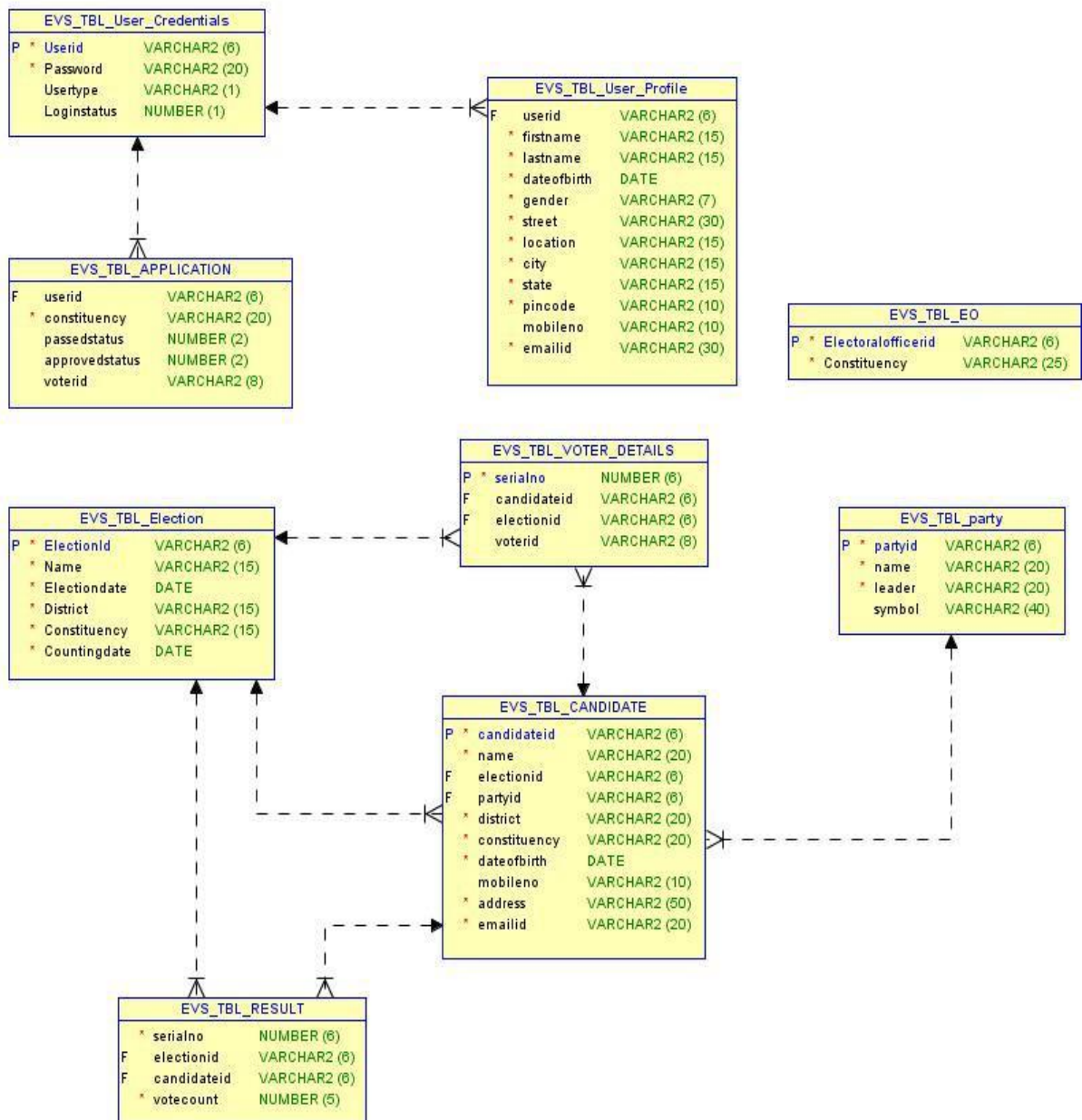
## 3.1 Use Case Diagrams

The requirements of a system can be represented using a use case model in the Use Case Diagram. The use case diagram for the actors of this case study is given as below.

### 3.1.1 Use Case Diagram for Admin



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## 1. Table: EVS\_TBL\_User\_Credentials

This table contains Authentication Information for Administrator, Electoral Officer & Voter

Field Name	Data Type	Description
Userid	VARCHAR2(6)	Primary Key*
Password	VARCHAR2(20)	Not Null
Usertype	VARCHAR2(1)	Either ['A','E','V']
Loginstatus	NUMBER(1)	Either [1 ,0]

\* First 2 letters of First Name followed by 4 digits auto generated number

## 2. Table: EVS\_TBL\_User\_Profile

This table contains User specific details entered during User Registration.

Field Name	Data Type	Description
Userid	VARCHAR2(6)	Foreign Key
Firstname	VARCHAR2(15)	Not Null
Lastname	VARCHAR2(15)	Not Null
Dateofbirth	DATE	Not Null
Gender	VARCHAR2(7)	Not Null
Street	VARCHAR2(30)	Not Null
Location	VARCHAR2(15)	Not Null
City	VARCHAR2(15)	Not Null
State	VARCHAR2(15)	Not Null
Pincode	VARCHAR2(10)	Not Null
MobileNo	VARCHAR(10)	Exact 10 digit only
EmailId	VARCHAR2(30)	

\* First 2 letters of First Name followed by 4 digits auto generated number

## 3. Table: EVS\_TBL\_Election

This table contains Election specific information, as necessary and applicable.

Field Name	Data Type	Description
ElectionId	VARCHAR2 (6)	Primary Key
Name	VARCHAR2(15)	Not Null
Electiondate	DATE	Not Null
District	VARCHAR2(15)	Not Null
Constituency	VARCHAR2(15)	Not Null
Countingdate	DATE	Not Null

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## 4. Table: EVS\_TBL\_Party

This table contains Party details like Party Name, Symbol & Leader Name.

Field Name	Data Type	Description
PartyId	VARCHAR2 (6)	Primary Key
Name	VARCHAR2(20)	Not Null
Leader	VARCHAR2(20)	Not Null
Symbol	VARCHAR2(40)	File reference

## 5. Table: EVS\_TBL\_Candidate

This table contains candidate details like Name of the Candidate, Election Name, Party Name and the contact details.

Field Name	Data Type	Description
CandidateId	VARCHAR2 (6)	Primary Key
Name	VARCHAR2(20)	Not Null
ElectionId	VARCHAR2 (6)	Foreign Key
PartyId	VARCHAR2 (6)	Foreign Key
District	VARCHAR2(20)	Not Null
Constituency	VARCHAR2(20)	Not Null
Dateofbirth	DATE	Not Null
MobileNo	VARCHAR(10)	Exact 10 digit only
Address	VARCHAR2(50)	Not Null
EmailId	VARCHAR2(20)	May or may not Null

## 6. Table: EVS\_TBL\_Application

This table contains details about request of voterid by user and the request status.

Field Name	Data Type	Description
Userid	VARCHAR2 (6)	FK
Constituency	VARCHAR2 (20)	Not Null
Passedstatus	NUMBER(2)	Either [1 2 3]*
Approvedstatus	NUMBER(2)	Either [0 1]**
VoterId	VARCHAR2(8)	***

\* 1-> New request, 2->Admin forwards to EO, 3-> EO approves/rejects

\*\* 0-> EO rejects, 1-> EO approve

\*\*\* 2 letters of user first name followed by 2 letters constituency name followed by 4 digit auto generated number



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## 7. Table: EVS\_TBL\_Result

This table contains the details about the no of vote received by each candidate.

Field Name	Data Type	Description
Serialno	NUMBER(6)	PK, Autogenerated
Electionid	VARCHAR2 (6)	FK
Candidateid	VARCHAR2 (6)	FK
Votecount	NUMBER(5)	Not Null

## 8. Table: EVS\_TBL\_EO

This table contains the details about the electoral officer.

Field Name	Data Type	Description
Electoralofficerid	VARCHAR2 (6)	Primary Key
Constituency	VARCHAR2(25)	Not Null

## 9. Table: EVS\_TBL\_Voter\_Details

This table contains the details about the voter id, election id & corresponding candidate id.

Field Name	Data Type	Description
Serialno	NUMBER(6)	PK, Autogenerated
Candidateid	VARCHAR2 (6)	FK
Electionid	VARCHAR2 (6)	FK
Voterid	VARCHAR2 (8)	FK

## Database Sequences

Sequence Name	Purpose	Start With
evs_seq_userid	User ID	1000
evs_seq_requestId	Voter Request ID	1000
evs_seq_electionId	Election ID	1000
evs_seq_partyId	Party ID	1000
evs_seq_candidateId	Candidate ID	1000
evs_seq_voterid	Voter ID	1000
evs_seq_resultId	Result ID	1000