|  |
| --- |
| Software Requirements Specification |
| Election Management System VERSION 1.0 – Voter, Manager and Admin Modules |
| Project Functional Requirement Specification , Version 1.2 |
|  |
| **Prepared by:** [**Team**](http://www.SoftwareTestingHelp.com) **8** |
|  |

|  |
| --- |
|  |

**Revision and Signoff Sheet**

**Document History**

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date | Author | Description of Change |
| 1 | 03/05/2018 | Harsha Pitawela | First |
| 1.1 | 03/19/2018 | Harsha Pitawela | Second-Includes Candidate and Party requirements for Admin Module |
| 1.2 | 04/23/2018 | Harsha Pitawela | Final-Includes Precinct, Election, Race, User Requirements for admin module, Voting and Change Address Request Requirements for Voter module, Voter Authorizing Requirements for Manager module. |

**Approvers List** - To track who has reviewed and signoff on the Test plan

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Role | Approver / Reviewer | Approval / Review Date |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Reference Documents**

|  |  |  |
| --- | --- | --- |
| **Version** | **Date** | **Document Name** |
| 1.0 |  | Election Management System VERSION 1.0 – Voter, Manager and Admin Modules -FSD |
|  |  |  |

Contents

[1. Purpose of the document: 5](#_Toc512288107)

[2. Project Overview: 5](#_Toc512288108)

[2.1 Audience: 5](#_Toc512288109)

[2.2 Hardware and Hosting: 5](#_Toc512288110)

[3. Information Architecture 5](#_Toc512288111)

[3.1 Login Module 5](#_Toc512288112)

[3.1.1 Forgot Password Module 5](#_Toc512288113)

[3.1.2 Log Off Module 6](#_Toc512288114)

[3.2 Voter Module 6](#_Toc512288115)

[3.2.1 Voter Registration Module 6](#_Toc512288116)

[3.2.2 Voter Status Module 6](#_Toc512288117)

[3.2.3 Voter Status View Module 6](#_Toc512288118)

[3.2.4 Voting Module 6](#_Toc512288119)

[3.2.5 Address Change Module 6](#_Toc512288120)

[3.3 Admin Module 7](#_Toc512288121)

[3.3.1 View Pending Voters Module 7](#_Toc512288122)

[3.3.2 Change Pending Voter Status Module 7](#_Toc512288123)

[3.3.3 E-mail Notification on Status Change 7](#_Toc512288124)

[3.3.4 Add Party Module 7](#_Toc512288125)

[3.3.5 View Party Module 7](#_Toc512288126)

[3.3.6 Edit Party Module 7](#_Toc512288127)

[3.3.7 Delete Party Module 7](#_Toc512288128)

[3.3.8 Add Candidate Module 7](#_Toc512288129)

[3.3.9 View Candidate Module 8](#_Toc512288130)

[3.3.10 Edit Candidate Module 8](#_Toc512288131)

[3.3.11 Delete Candidate Module 8](#_Toc512288132)

[3.3.12 Add User Module 8](#_Toc512288133)

[3.3.13 View User Module 8](#_Toc512288134)

[3.3.14 Edit User Module 8](#_Toc512288135)

[3.3.15 Delete User Module 9](#_Toc512288136)

[3.3.16 Add Precinct Module 9](#_Toc512288137)

[3.3.17 View Precinct Module 9](#_Toc512288138)

[3.3.18 Edit Precinct Module 9](#_Toc512288139)

[3.3.19 Delete Precinct Module 9](#_Toc512288140)

[3.3.20 Add Election Module 9](#_Toc512288141)

[3.3.21 View Election Module 9](#_Toc512288142)

[3.3.22 Edit Election Module 9](#_Toc512288143)

[3.3.23 Delete Election Module 10](#_Toc512288144)

[3.3.24 Add Race Module 10](#_Toc512288145)

[3.3.25 View Race Module 10](#_Toc512288146)

[3.3.26 Edit Race Module 10](#_Toc512288147)

[3.3.27 Delete Race Module 10](#_Toc512288148)

[3.4 Manager Module 11](#_Toc512288149)

[3.4.1 Voter Authorization Module 11](#_Toc512288150)

[4. Site Design 12](#_Toc512288151)

[4.1 Aesthetic/HTML Requirements and Guidelines 12](#_Toc512288152)

[5. Sign-Off Document 13](#_Toc512288153)

# Purpose of the document:

This is **not** a project plan. It is a guide for system architecture and development, not for phasing, timelines or deliverables.

This document is divided into three sections:

• Project Overview

• Information Architecture

• Site Design

# 2. Project Overview:

## 2.1 Audience:

This document is intended as a complete guide for developers of EMS(Election Management System) 1.0. This document is specially designed for software engineers; non-specialists may find the document a useful point of reference. By reading this guide, you will learn based on which requirements the EMS will developed and what's behind some of the advanced features that are not always obvious at first sight.

## 2.2 Hardware and Hosting:

R & J’s servers will be hosted at ComeMummy’s site.

EMS will be hosted on two servers: One to host the actual website and (language)code, and the other to host the (emsdb) database.

# Information Architecture

There are three main user modules in the system namely voter, manager and admin. Irrespective of the user role, each user will need to use the common login interface defined in 3.1 Login Module to login to the EMS.

## 3.1 Login Module

Login module is an important module in EMS, where user will log in to the EMS using the username and password credentials that they gave when they registered their accounts.

Upon successful login the user should be able to view the panel that is designated to him based on his role i.e. voter, manager or admin.

### 3.1.1 Forgot Password Module

If a user forgets his password or username, he should be directed to a page where he could enter his registered e-mail address, to which the EMS will send an e-mail containing a password reset link.

### 3.1.2 Log Off Module

The user can click on log off button to log out of the EMS. If the user is inactive for 5 minutes, the system should automatically log the user out.

## 3.2 Voter Module

This module will support functions that voters will perform in the system, such as registering as voters, and voting in elections.

### 3.2.1 Voter Registration Module

New voters will use this module to register as voters for upcoming elections.

Following fields in the registration form would be mandatory for new voters:

1. Username
2. E-mail address
3. Password & Confirm Password – must be matching
4. Identity Type
5. Identity No
6. Date of Birth
7. Address 1
8. City
9. Zip Code
10. State
11. Telephone No

### 3.2.2 Voter Status Module

Once registered, a voter’s status would be ‘Pending’ until modified by admin to either Registered, Rejected or On Hold status.

### 3.2.3 Voter Status View Module

Voter should be able to login and view the status of his application. But he cannot change any of the details he has provided during his registration. If the admin rejects or puts the status “on hold”, he should be able to see the comments made by the admin.

### 3.2.4 Voting Module

Voter should be able to generate ballot paper for the ongoing elections with races applicable to him/her base on his/her precinct and cast his/her vote for the candidates.

### 3.2.5 Address Change Module

Voter should be able to make a request to admin if he/she changes his/her address with following information.

1. Address 1
2. Address 2
3. City
4. State
5. Zip Code
6. Proof Id
7. Id No
8. Precinct

## 3.3 Admin Module

Upon successful login, admin should be able to see the admin panel which includes following sub modules.

### 3.3.1 View Pending Voters Module

Admin should be able to view details of new voters who have just submitted a voter registration application.

### 3.3.2 Change Pending Voter Status Module

Upon inspection of details of new voters, admin should be able to change the status of pending voters to Registered, Rejected or On Hold status. If the status is changed to Rejected or On Hold, the admin should make a comment in the application for not changing the status to Registered.

### 3.3.3 E-mail Notification on Status Change

An automatic e-mail should be sent to the voter’s registered e-mail address upon status change. It should also include any comments admin has made if status is not changed to Registered status.

### 3.3.4 Add Party Module

Admin should have the authority to add new parties to the database with following details.

1. Party Name
2. Date Created
3. Status (Active/Inactive)

### 3.3.5 View Party Module

Admin should have the authority to view details of parties in a table. If he desires he should be able to view details of individual parties.

### 3.3.6 Edit Party Module

Admin should have the authority to edit following details of the parties.

1. Party Name
2. Date Created
3. Status (Active/Inactive)

### 3.3.7 Delete Party Module

Admin should have the authority to delete parties. However the deletion should not completely remove the party record from the database. Instead it should change the status of that party to ‘Inactive’.

### 3.3.8 Add Candidate Module

Admin should have the authority to add new candidates to the database with following details.

1. First Name
2. Last Name
3. Address 1
4. Address 2
5. City
6. State
7. Zipcode
8. Precinct
9. Date of Birth
10. Current Party
11. Status –(Active/Inactive)

### 3.3.9 View Candidate Module

Admin should have the authority to view details of candidates in a table. If he desires he should be able to view details of individual candidates.

### 3.3.10 Edit Candidate Module

Admin should have the authority to edit following details of the candidates.

1. Address 1
2. Address 2
3. City
4. State
5. Zipcode
6. Precinct
7. Current Party
8. Status – (Inactive/Active)

### 3.3.11 Delete Candidate Module

Admin should have the authority to delete candidates. However the deletion should not completely remove the candidate record from the database. Instead it should change the status of that candidate to ‘Inactive’.

### 3.3.12 Add User Module

Admin should have the authority to add new users to the database with following details.

1. First Name
2. Last Name
3. Username
4. Password
5. Phone
6. E-mail
7. Role
8. Status –(Active/Inactive)

### 3.3.13 View User Module

Admin should have the authority to view details of users in a table. If he desires he should be able to view details of individual users.

### 3.3.14 Edit User Module

Admin should have the authority to edit following details of the users.

1. Phone
2. E-mail
3. Role
4. Status – (Inactive/Active)

### 3.3.15 Delete User Module

Admin should have the authority to delete users. However the deletion should not completely remove the user record from the database. Instead it should change the status of that user to ‘Inactive’.

### 3.3.16 Add Precinct Module

Admin should have the authority to add new precincts to the database with following details.

1. Precinct Name
2. City
3. County
4. Congressional District
5. State

### 3.3.17 View Precinct Module

Admin should have the authority to view details of precincts in a table. If he desires he should be able to view details of individual precincts.

### 3.3.18 Edit Precinct Module

Admin should have the authority to edit following details of the precinct.

1. Precinct Name
2. City
3. County
4. Congressional District
5. State

### 3.3.19 Delete Precinct Module

Admin should have the authority to delete precincts. However the deletion should not completely remove the precinct record from the database. Instead it should change the status of that precinct to ‘Inactive’.

### 3.3.20 Add Election Module

Admin should have the authority to add new elections to the database with following details.

1. Election Title
2. Election Date

### 3.3.21 View Election Module

Admin should have the authority to view details of elections in a table. If he desires he should be able to view details of individual elections.

### 3.3.22 Edit Election Module

Admin should have the authority to edit following details of the election.

1. Election Title
2. Election Date

### 3.3.23 Delete Election Module

Admin should have the authority to delete elections. However the deletion should not completely remove the election record from the database. Instead it should change the status of that election to ‘Inactive’.

### 3.3.24 Add Race Module

Admin should have the authority to add new races to the database with following details.

1. Race Title
2. Race Type
3. Election Id
4. EGU(Electoral Geographical Unit) Id
5. Instruction

### 3.3.25 View Race Module

Admin should have the authority to view details of races in a table. If he desires he should be able to view details of individual races.

### 3.3.26 Edit Race Module

Admin should have the authority to edit following details of the race.

1. Race Title
2. Race Type
3. Election Id
4. EGU(Electoral Geographical Unit) Id
5. Instruction

### 3.3.27 Delete Race Module

Admin should have the authority to delete races. However the deletion should not completely remove the race record from the database. Instead it should change the status of that race to ‘Inactive’.

## Manager Module

Upon successful login, manager should be able to see the manager panel which includes following sub modules.

### 3.4.1 Voter Authorization Module

When a voter shows up at a polling station, manager should have the authority to authorize him/her to vote for the ongoing election.

# Site Design

## 4.1 Aesthetic/HTML Requirements and Guidelines

EMS must deliver a compelling visitor experience. However, it cannot sacrifice security and confidentiality.

The web site ‘look’ must conform to the following requirements:

1. The site should be HTML 4.0 compliant.
2. All pages must download in less than 10 seconds over a 56k modem connection.- Performance requirement
3. All pages must fit in a web browser displayed on a computer set to 640 x 480 pixels.
4. All pages should be responsive and compatible with any mobile browser.
5. All pages must use a web safe color palette.
6. The site must be compatible with Internet Explorer 4, 5 and 5.5, and with Firefox 4-6, as well as Google Chrome 4.0 and later.
7. The site must conform to the WAI Accessibility Guidelines outlined at <http://www.w3.org/TR/WAI-WEBCONTENT/> , wherever possible.
8. All site pages should be available for search engine robots.
9. All pages that use static images should be displayed correctly. **Guidelines**

# Sign-Off Document

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The following parties have read and agreed with this Requirements Definition document for the EMS application functionality.

After approval of this Requirements Definition phase, any significant changes in the scope of this project will require validation of existing project costs and schedules.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name Date

Client

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name Date

Project Manager

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name Date

Business Lead

**Prepared by: Team 8**