

Test Plan

University of Iowa



Creation Date: March 2, 2018
Plan Start Date: February 19, 2018
Plan Expiration Date: April 30, 2018

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1 Introduction

The project is about making an online voting portal for their election management system. The goal is to build an integrated application system integrating demographics, voter registration, and configurable ballot management, voting with paper trail, results and system administration.

1.1 Objectives

The objective of this document is to create a test plan for the Voting Portal. The test plan should include the scope, test approach and test cases for the software.

1.2 Team Members

Resource Name	Role
Madeline Silva	Testing the component they build
Nabeel Khan	Testing the component they build
Jordan Pohlman	Testing the component they build

2 Scope

The goal of this project is to build a web application for an election management system. It will include voter registration, customized demographics, ballot management, system administration, results, and voter history. The initial phase of testing will include the “must have” requirements. During this phase, the tester must be able to:

1. Create an account
2. Send Email Verification for the Next Step
3. Register the User for Voting
4. View a Homepage

As the team works with the product they will define the needs for the second phase.

3 Test Approach

The project is using an agile approach, with weekly iterations. At the end of each week the requirements identified for that iteration will be delivered to the team and will be tested.

The Java Play framework includes a test folder that can be run from the SBT console. The team will be using JUnit tests during the entire process in order to test the functionality of the backend of the web application. This incorporates the database functionality as well as any methods created in the controller classes.

3.1 Test Automation

No automated functional tests are planned at this time.

4 Test Environment

For testing the function we will be using the JUnits testing and for the functional testing we will be using Selenium.

5 Milestones / Deliverables

5.1 Test Schedule

Task Name	Start	Finish	Comments
Test Planning	2/26/18	3/5/18	
Initial Testing	4/1/18	4/15/18	
Functional Testing – Iteration 1	4/15/18	4/23/18	
Functional Testing – Iteration 2	4/23/18	4/30/18	
Final Testing	4/30/18		

5.2 Deliverables

Deliverable	Date / Milestone
Test Plan	March 5, 2018
Test Results	April 23, 2018
Test Status Report	April 30, 2018

6 Test Plan

Verify Account		
Type	Name=username	
Type	Name=password	
Submit	http://localhost:9000/login	verify the username & password

Sign In as Admin		
Open	http://localhost:9000/login	
type	Name=username	admin

type	Name=password	123456
type	css='submit-button'	
click	Link=Log out	

Sign In as Manager		
open	http://localhost:9000/login	
type	Name=username	manager
type	Name=password	123456
type	css='submit-button'	
click	Link=Log out	

Sign In as User		
open	http://localhost:9000/login	
type	Name=username	john
type	css='submit-button'	
type	Name=password	123456
click	Link=Log out	

Test ID: test-001		
Requirement	Users capable of SignUp an account	
Initial Conditions	Individual users have accurate information for themselves	
Test Procedure	<ol style="list-style-type: none"> 1. User goes to SignUp page 2. User enters in all the necessary user information and click SignUp 3. Check database 	
Expected	Observation	(Y/N)?

The database contains the user's information that was used to register their account	After the user register an account, they will be lead to login page.	Y
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Test ID: test-002		
Requirement	User capable of registering for election	
Initial Conditions	Accurate user demographic information	
Test Procedure	<ol style="list-style-type: none"> 1. User Sign In and goes to 2. User enters in all the necessary registration information 3. Check database 	
Expected	Observation	(Y/N)?
The database contains the user's election registration information will be updated	After user register for the election he will be redirected to the confirmation page	Y

Test ID: test-003		
Requirement	Admin capable of generating election	
Initial Conditions	Admin must know for which county to create an election	
Test Procedure	<ol style="list-style-type: none"> 1. Admin Sign In and goes to create election portal. 2. Admin enters in all the necessary election information 3. Check database for the created election. 	
Expected	Observation	(Y/N)?
The database contains the election information will be updated.	After admin adds an election he will be redirected to the confirmation page.	Y

Test ID: test-004	
Requirement	User must be able to see election in his county
Initial Conditions	Election must be generated for the county

Test Procedure	<ol style="list-style-type: none"> 1. User Sign In and goes to the homepage. 2. User must be able to see the election in the county. 3. User must be able to generate their vote. 	
Expected	Observation	(Y/N)?
The database contains the voting information should be updated.	After the user casts the votes he should not be able to cast the vote for the election again.	Y

Test ID: test-005		
Requirement	Admin must be able to see the results	
Initial Conditions	Users should have cast vote for the generated elections	
Test Procedure	<ol style="list-style-type: none"> 1. Admin Sign In and goes to Results page. 2. Admin selects the election for which the results has to be displayed. 3. Admin should be able to see the count of the votes of different candidates. 	
Expected	Observation	(Y/N)?
The database containing the results of the election should be populated with the votes.	The results of the election should be visible.	Y

Test ID: test-006		
Requirement	User must be able to give votes to the election in his county	
Initial Conditions	Election for the county should be generated.	
Test Procedure	<ol style="list-style-type: none"> 1. User sign in into his profile. 2. User selects the election to give his vote. 3. User should be able to give his vote to the desired candidate and then it should be updated in the database. 	
Expected	Observation	(Y/N)?

The database containing the results of the election should be populated with the votes.	The vote of a particular candidate will increase by one.	Y
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7 Resources

Testing Your Application. (n.d.). Retrieved March 03, 2018, from <https://www.playframework.com/documentation/2.6.x/JavaTest>