

Master Plan
University of Iowa



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1 Executive Summary

The aim is to build an integrated application system for voting, integrating demographics, voter registration, and configurable ballot management, voting with paper trail, results and system administration.

2 Planning Process and Methodology

The Agile process model has been chosen for the software process model as well as a bit of test driven development. The test plan is as outlined in separate documentation prepared by the team. To test the web application and its associated functions, JUnit tests are created within the test folder inside the Java Play framework. The schedule for testing aligns with master plan schedule listed in this report. Requirements are a major driving force in the planning of this project and its size estimates. After the planning and estimation stage, the next step is to develop the software and determine its risks. The risks depend on the development environment, methodology, and the effort/motivation of the developers. Lastly, the software must undergo a formal review and approval from both the team and the customer. Using Agile methodology, the team wishes to create a better knowledge transfer and reduce developer misunderstandings. Each developer shall have a working understanding of the code created. This process model will also make a list of tasks for each developer per week and hold each accountable.

3 Schedule and Deliverables

3.1 Schedule

Week of	Goal	Comments
3/5	Finish implementing login, user account creation, and voter registration pages	
3/13	Working on the design of the overall application	
3/20	Implement User/Admin Dashboard	
3/27	Implement create Election functionality for admin	
4/2	Implement User Voting Feature	
4/9	Implement Votes Counting and Results Feature	
4/16	Start working on Functional Testing	
4/23	Final Functionality Testing	
4/30	Project Due	

3.2 Deliverables

Deliverable	Date / Milestone
Scope Questions	February 19, 2018
Initial Functions	February 26, 2018
Documentation/Plans	March 5, 2018
Completed Login, User and Voter Registration Dashboard Initial Precinct Tables	March 19, 2018
CRUD Functions for Precincts User Interface Setup and Functional Functional Database	March 26, 2018
CRUD Functions for Electoral Geography Started Querying Capabilities	April 2, 2018
Functions for Electoral Geography Logic Related to Elections and Ballots Started	April 9, 2018
Functions for Elections and Ballots complete Planning on complete system integration	April 16, 2018
Presentation	April 30, 2018

4 Current Technology and Resources

4.1 Human Resources

Development Team
Customer

4.2 Roles & Responsibilities

Name	Role
Madeline Silva	Back-End
Nabeel Khan	Database and Testing
Jordan Pohlman	Front-End Design and Documentation

4.3 Technology Stack

Java Play Framework
MySQL
HTML/CSS

Bootstrap

5 Technology Goals

Goal 1: Create a user friendly way for citizens to register to vote and vote in elections.

Goal 2: Create a user friendly way for administrators to hold elections, collect results, and analyze demographic data.

6 Appendices

Estimate Work Document

Test Plan Document