Smart Voting Group LLC

Smart Voting

Project Plan

Version 2.0 2022 February 6

REVISION HISTORY

Note: All changes and revisions are highlighted in this document.

Revision	Date	Author	Summary of Changes
1	2022-02-06	Smart Voting Team	 Updated all dates Added revision history parts Updated Gantt Chart Updated RAM chart Updated Approval Highlighted all changes

DOCUMENT APPROVAL LIST

Version	Approved By	Signature	Date
1.0	Matt Campbell Stephen Davis Satabdi Sangma Michael Sirna	matthew.campbell@georgebrown.ca stephen.davis@georgebrown.ca satabdi.sangma@georgebrown.ca michael.sirna@georgebrown.ca	2021-10-10
2.0	Matt Campbell Stephen Davis Satabdi Sangma Michael Sirna	matthew.campbell@georgebrown.ca stephen.davis@georgebrown.ca satabdi.sangma@georgebrown.ca michael.sirna@georgebrown.ca	2022-02-06

DOCUMENT DISTRIBUTION LIST

Version	Name of the Receiver / Group	Date
1.0	Matt Campbell Stephen Davis Satabdi Sangma Anjana Shah Michael Sirna	2021-10-10
2.0	Matt Campbell Stephen Davis Satabdi Sangma Anjana Shah Michael Sirna	2022-02-06

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1 EXECUTIVE SUMMARY

Objective	The purpose of this document is to outline the various features, risks, and plan prior to development of the Smart Voting System.
Corporate Goals Addressed	All presented material in this document surrounds the scope, delivery, planning, and risks of the Smart Voting System. Each part is detailed in its designated section of the document.
Planned Start Date	Monday, September 20, 2021
Planned End Date	Friday, April 1, 2022

2 PROJECT APPROVERS, REVIEWS, AND DISTRIBUTION LIST

Project Role	Name	E-mail(s)	Date
Director	Anjana Shah	ashah@georgebrown.ca	2022-02-06
Team	Matt Campbell Stephen Davis Satabdi Sangma Michael Sirna	matthew.campbell@georgebrown.ca stephen.davis@georgebrown.ca satabdi.sangma@georgebrown.ca michael.sirna@georgebrown.ca	2022-02-06

3 SCOPE

In Scope	Out of Scope	
Ledger Database The web application will use a ledger database in order to uphold the legitimacy of ballots cast. Ledger databases are databases that can be written to, but not edited.	Voter Card Distribution This web application will NOT be responsible for the distribution of voter cards. That would be the responsibility of Election Officials and the government.	
Identification Verification Users will have to verify themselves through the use of voter cards to keep the integrity of the election.	Political Party and Candidate Information It is the duty of candidates and political parties to fill out information about themselves and their policies. The production and development team will not fill out candidate or party information.	
Efficient Voting Allow users to bypass the normal complications that can be faced with in-person voting (i.e. waiting in lines, going through identity verification, etc.)	General Election Information (Riding Boundaries & Election Date) It is the responsibility of election officials to set riding boundaries, election date & times, and other related information.	
Analytics The web application will display the analytics data of the election.		

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4 DELIVERABLES

The project strives to deliver a secure voting web application that uses a ledger database to assure the integrity of elections by the proposed end date. Ledger databases are databases in which data can be written but not edited, thus upholding the security. Users will be allowed to view information on candidates and party platforms to make more informed decisions while voting. The application will also allow users to view analytics on their elections.

5 ASSUMPTIONS

It is assumed that all users who use this product would have access to an internet connection and device that they are able to use. This product is meant as an alternative to voting, and by no means implies that it will completely replace current voting systems if implemented. The system is simply an extra option for citizens, especially those who have little time, or health issues. All of this also assumes that a government would approve of the system being used across their countries. The plans and goals set out in this document and others attached are the desired outcomes and by no means represent the final product.

6 DEPENDENCIES

We are not in charge or control of Canada Post or other courier services that may cause delays delivering voter registration cards.

7 RISK MANAGEMENT

While unrealistic in the scope of the Capstone Project, the first six rows of the following table were left in because they are a possibility in a real world development environment, and they are problems which we are still accounting for in the project..

Potential Risk	Severity (H/M/L)	Likelihood (H/M/L)	Management Strategy
DDOS Attacks	cks H H		Anti-DDOS Protection Services (Cloudflare)
Hacking	I	I	Background check developers, multistep data verification, IP address monitoring
Cloud Service Failure	П	L	Have multi cloud, geo redundant deployments
SQL Injection Attacks	H	М	Input verification & sanitation
Vulnerable Coding Packages	М	М	Decommission and remove legacy packages
Broken Access Control	П	М	Limit the number of accounts of elevated access permissions
Person Hours	Н	М	Adjust team members hours and jobs as necessary, or adjust personal schedules and prioritise.
Knowledge Level	L	L	Development team has sufficient knowledge and access to resources to complete the project.
Potential Coding Failure (i.e. Corruption, Lost Code, etc.	Н	L	Constant backups on other computers, and code management through Github mitigates this issue.

8 COMMUNICATION

Reporting

The following reports will be produced:

Report	Audience	Frequency
Project Summary Project VIsion High Level Requirements User Personas and Stories Project Plan Team Charter Product and Sprint Backlog	Project Director Anjana Shah	Only once as of 2021-10-10
Revised Project Plan Project Status Report I	Project Director Anjana Shah	Only once as of 2022-02-06

Meetings

Please see the Minutes of Meeting PDF attached in Sprint 5.

9 TASK LISTING (WBS - WORK BREAKDOWN STRUCTURE)

The following resource proposal template summarises the resource hours committed to this project, upon final approval of this document.

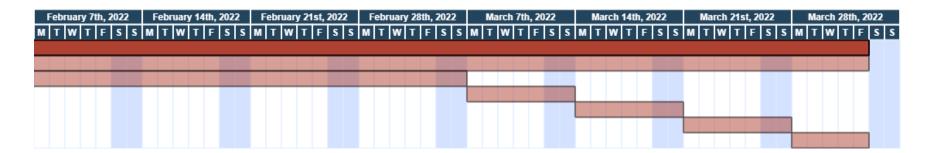
Changes as of Sprint 5: Github Issue Creation is no longer part of the table as we felt it was unnecessary in our breakdown structure. Database Development's duration has been extended since we will continuously work on the database portion of the assignment for maintenance, to fix bugs, and to change formatting within the databases.

Reference	Tasks	Duration	Dependency
А	Database Development	Full Length	А
В	Front End & Back End Development	≈ 5 Weeks	В
С	Unit Testing	1 Week	С
D	Bug Fixes	1 Week	D
E	User Acceptance Testing	1 Week	E
F	Deployment to Amazon Web Services	4 Days	F

10 GANTT CHART

Changes as of Sprint 5: To reiterate, Github Issue Creation is no longer part of the chart as we felt it was unnecessary in our breakdown structure. Database Development's duration has been extended since we will continuously work on the database portion of the assignment for maintenance, to fix bugs, and to change formatting within the databases. Front-end and Back-end development has been given an extra day as it was started a day earlier than originally planned. All columns for days that are completed are highlighted green.

	Tools Name	Duration	Start	ETA	January 10th, 2022 January 17th, 2022 January 24th, 2022 January 31st, 2022
	Task Name	Durauon	Start	EIA	M T W T F S S M T W T F S S M T W T F S S M T W T F S S
	Complete project execution	81 days	2022-01-10	2022-04-01	
Α	Database Development	81 days	2022-01-10	2022-04-01	
В	Front-end and Back-end Development	36 days	2022-01-30	2022-03-07	
С	Unit Testing	7 days	2022-03-07	2022-03-14	
D	Bug Fixes	7 days	2022-03-14	2022-03-21	
Е	User Acceptance Testing	7 days	2022-03-21	2022-03-28	
F	Deployment to Amazon Web Servers	4 days	2022-03-28	2022-04-01	



11 MILESTONES

Major Activity or Milestone	Estimated Milestone Target Date	Owner Reviewer Team Member
Database Development	2022-04-01	Stephen, Mike
Front End & Back End Development	2022-03-07	Entire Team
Unit Testing	2022-03-14	Mike, Sam
Bug Fixes	2022-03-21	Entire Team
User Acceptance Testing	2022-03-28	Sam, Matt, Stephen
Deployment to Amazon Web Services	2022-04-01	Stephen, Mike

12 RAM - RESPONSIBILITY ASSIGNMENT MAX

Task	Stephen	Mike	Matt	Sam
GitHub Issue Creation			Р	S
Database Development	Р	S	S	
Front End & Back End Development	S	Р	S	S
Unit Testing		Р		S
Bug Fixes	S	S	Р	S
User Acceptance Testing	S		S	Р
Deployment to Amazon Web Services	Р	S		

P = Primary, S = Secondary

13 APPROVAL

The signatures below indicate their approval of the contents of this document:

Project Role	Name	Signature	Date
Team Member	Matthew Campbell	matthew.campbell@georgebrown.ca	2022-02-06
Team Member	Stephen Davis	stephen.davis@georgebrown.ca	2022-02-06
Team Member	Satabdi Sangma	satabdi.sangma@georgebrown.ca	2022-02-06
Team Member	Michael Sirna	michael.sirna@georgebrown.ca	2022-02-06