

Stakeholders:

Project Manager - Must ensure the project is completed on time and on budget in order to fulfill his contract with the company and customers.

Developers : The Developers are involved, and hold stakes in, the actual coding and creation of the program. Without developers, there is no program..

Testers: Testers have a direct stake in the project and how it is implemented since they will be designing the tests for the built software.

Voters: Voters will have a new system to learn and use in contrast to any current system. They are a primary user of the system.

Voting administrator: The voting administrator will be entering polls and overseeing results of the polls. This will be far different than overseeing voting counters and reception of ballots.

Candidates - If the vote is deciding on the most suitable candidate among people, these candidates will want to ensure the vote is fair and that they are accurately represented.

Consultant: If any additional information is required the consultant would be available.

Database Analyst: Would be interested in looking at the voting data to ensure accuracy and make sure data is represented in a readable manner.

Actors:

Voting Administrator: inherit from User/Voter (decide later, can admin vote?)

User: Can view poll

Voter: inherit from User

Use Cases:

Admin <<include>> cases:

Log in

Administrator can set up a poll, with options such as:

Anywhere from 2-infinite voting options,

Multiple votes per user (Pick your favorite 3 options)

Open/close poll feature

Set time limit for poll

Set whether voters need to be authenticated or unlimited access

Allow or disallow changing of votes

Administrator result-publishing– (when should results be posted?)

- Real Time Publishing
- Publish after time limit expires
- Not publish at all (only show results to admin)

Voter can: (Completed on Use case diagram)

cast a vote

Re-vote before poll expires

Users can:

View information on candidates

View poll results if available

Register to become a voter

Must authenticate identity

Administrators can:

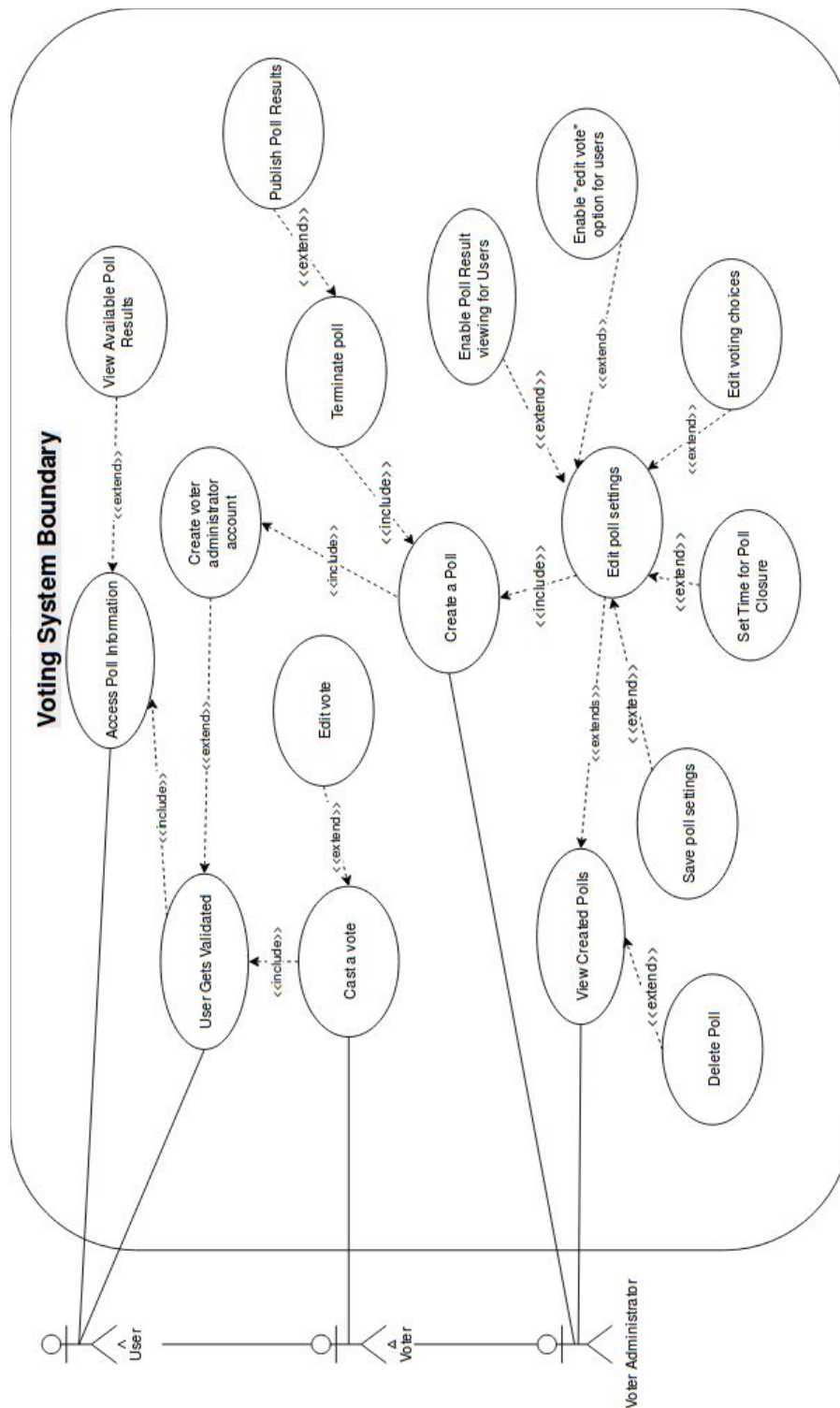
Save poll options to start a similar poll at a later time

Edit poll options (only for new polls, can't edit an active poll)

Check poll results (If time limit expires)

UML Diagram:

<https://www.draw.io/#G1VS1-GpHjoVaUvFiJx5NAWNv3LQNG-vEy>



Formal Use Case Descriptions:

USER CASES:

Name	Access Poll Information
Actors	User
Goal	Allow a user to see the poll and information on the candidates.
Precondition	None
Scenario	<ol style="list-style-type: none">1. User accesses poll page.2. User will be able to see the poll and candidate information
Exceptions	<ul style="list-style-type: none">• The poll does not exist.

Name	Create voter admin account
Actors	User
Goal	Create credentials with which to log in for future access to your polls.
Precondition	None
Scenario	<ol style="list-style-type: none">1. User accesses web page2. User wants to create account3. User selects "create admin account"4. User enters valid credentials5. User submits account creation6. User verifies email address
Exceptions	User does not have a valid email account. Authentication for the user has failed. The polling system is not available.

Name	User Gets Validated
Actors	User, Voter, Voter Administrator
Goal	Allow the user to become a voter, a voter to vote, and a voter administrator to create/edit a poll.
Precondition	None
Scenario	<ol style="list-style-type: none">1. The user accesses the log-in page.

	<ol style="list-style-type: none"> If the user has an account, they may log in. If the user does not have an account they can make one.
Exceptions	<ul style="list-style-type: none"> The user account already exists.

Name	View Available Results
Actors	User
Goal	Allows user to access published Poll results.
Precondition	Must be a user
Scenario	<ol style="list-style-type: none"> User accesses polling site User accesses Poll information User views final results if published.
Exceptions	<ul style="list-style-type: none"> Poll is deleted Poll does not exist

VOTER CASES:

Name	Cast a Vote
Actors	Voters
Goal	To capture user's opinion on what is the best option
Precondition	Validated voter, must have access to a specific poll
Scenario	<ol style="list-style-type: none"> User accesses poll User can view candidate information User can select the number of candidates designated by the vote admin User submits selection(s)
Exceptions	<ul style="list-style-type: none"> User selected an invalid number of candidates Poll ended before user submission

Name	Edit a vote
Actors	Voters
Goal	To allow a voter to change their vote(s)

Precondition	<ol style="list-style-type: none"> 1. User must have voted in a poll previously 2. Said poll must still be open
Scenario	<ol style="list-style-type: none"> 1. User accesses poll information 2. User can view previous vote(s) 3. User can choose to change some or all of their vote(s) 4. User can submit changes to some or all of their vote(s)
Exceptions	<ul style="list-style-type: none"> • Poll time expires before user submits edited votes • User selected an invalid number of candidates

VOTER ADMINISTRATOR CASES:

Name	Create A Poll
Actors	Voter Administrator
Goal	Create a poll for users to vote on
Precondition	User should be a voter administrator
Scenario	<ol style="list-style-type: none"> 1. User logs in as Voter Administrator 2. User Creates Poll
Exceptions	<ul style="list-style-type: none"> • User did not complete poll settings

Name	Edit Poll Options
Actors	Voter Administrator
Goal	Edit the settings and options for a specific poll
Precondition	An already created poll is selected for editing. The poll is not already released.
Scenario	<ol style="list-style-type: none"> 1. User Selects to edit poll 2. User adds options to poll 3. User sets poll closure time 4. User sets Authentication requirements for poll 5. User saves poll settings 6.
Exceptions	<ul style="list-style-type: none"> • User tries to edit poll after release

Name	Edit Voting Choices
Actors	Voter Admin
Goal	To add or remove candidates from an existing poll, and launch new poll
Precondition	<ol style="list-style-type: none"> 1. Voter Admin must have a previous or ongoing poll 2. Voter Admin must be logged in
Scenario	<ol style="list-style-type: none"> 1. Voter Admin views page listing all polls 2. Voter Admin selects poll to edit 3. Voter Admin can edit, add, or remove some or all fields 4. Voter Admin can name the new poll 5. Voter Admin can submit the newly named poll.
Exceptions	<ul style="list-style-type: none"> • Voter Admin failed to edit the existing poll

Name	Terminate Poll
Actors	Voter Administrator
Goal	End a poll by timer or at the Voter Administrators discretion
Precondition	Poll must be created and released
Scenario	<ol style="list-style-type: none"> 1. User chooses to terminate poll or poll timer runs out.
Exceptions	<ul style="list-style-type: none"> • Poll has not been released yet.

Name	Publish Poll Results
Actors	Voter Administrator
Goal	At the closure of a poll, the user has the option of publishing the poll results, making it public information.
Precondition	A poll must have closed
Scenario	<ol style="list-style-type: none"> 1. User chooses to release the poll results, following closure of Poll
Exceptions	<ul style="list-style-type: none"> • Poll has not closed yet • Poll has not been opened yet • Poll does not exist

Name	Set Time for Poll Closure
Actors	Voter Administrator
Goal	Allow the Admin to set the time that the poll is open.
Precondition	The user must be a voter administrator and a poll must have been created.
Scenario	<ol style="list-style-type: none"> 1. The voter administrator gets validated. 2. The voter administrator creates a poll. 3. The voter administrator can then set the time that the poll will be available for.
Exceptions	<ul style="list-style-type: none"> • The poll was incorrectly set up.

Name	Save Poll Settings
Actors	Voter Administrator
Goal	Save changes made to an unreleased poll
Precondition	A poll has been opened for editing
Scenario	<ol style="list-style-type: none"> 1. User has opened a poll for editing 2. User has made changes to the poll 3. User saves the poll for later editing/release
Exceptions	<ul style="list-style-type: none"> • Changes have not been made to the poll

Name	Enable Poll Result Viewing for Users
Actors	Voter Administrator
Goal	This would allow the administrator to open the poll for viewing to desired users.
Precondition	The administrator must have created a poll.
Scenario	<ol style="list-style-type: none"> 1. The user opens a poll for editing. 2. The user selects which users are able to see the poll results and whether they are in real time or not.
Exceptions	The poll was not created.

Name	View Created Polls
Actors	Voter Administrator
Goal	Show the Voter Administrator all of the polls that they have created
Precondition	User is a voter administrator
Scenario	<ol style="list-style-type: none"> 1. User logs in as a Voter Administrator 2. User opens their page of created polls
Exceptions	<ul style="list-style-type: none"> • User is not a Voter Administrator

Name	Delete Poll
Actors	Voter Administrator
Goal	Allow the administrator to delete an existing poll.
Precondition	The administrator must be validated and the poll must already exist.
Scenario	<ol style="list-style-type: none"> 1. The administrator logs in. 2. The administrator finds a poll they wish to remove. 3. The administrator deletes the poll.
Exceptions	<ul style="list-style-type: none"> • User has no polls created

Name	Enable Edit Vote
Actors	Vote Admin
Goal	Allow voters to change their votes until the poll closes
Precondition	<ol style="list-style-type: none"> 1. User must be logged in 2. User must be in the process of creating a poll or editing a poll
Scenario	<ol style="list-style-type: none"> 1. User navigates to the edit/create poll page 2. User can select an option which allows voters to edit their votes 3. User can submit the completed poll
Exceptions	<ol style="list-style-type: none"> 1. User fails to edit or create a poll properly