1.

As an election official

I want to be able to share the results to social media So that the election results can be publicized

Acceptance Criteria

After the winner(s) is selected, I want to be able to press a button to share it on a social media website.

Definition of Done

I would want to make sure that the results are correct and that when the users press the button, they are properly transferred to a social media site of their choice with the results

Effort: Small, Medium, Large, Extra Large (estimate of effort and time) OR number of hours needed

Medium

PBI Author(s)

Team 4

As an Election Official,

I want to be able to see all of the results of votes based on the specific candidate So that we can clearly see where the results landed at the party

Acceptance Criteria (conditions that have to be fulfilled to ensure the story is complete)

I want a system that retrieves all votes cast for the candidate and tallies them up. The system displays the total vote count for the candidate on the terminal. The tally is accurate and matches the actual number of votes cast.

Definition of Done (what is required by the team before sending out for review)

I want the vote tally functionality to be implemented and tested for accuracy. Tally data is securely stored in the database and can be accessed by election officials. Tally data can be exported or visualized in different formats for reporting purposes. The code is reviewed and tested by the development team.

Effort: Small, Medium, Large, Extra Large (estimate of effort and time) OR number of hours needed

Small

PBI Author(s)

Team 4

As an Election Official

I want to be able to handle ties through a fair coin toss So that the winner of the election can be determined in a transparent and unbiased manner

Acceptance Criteria (conditions that have to be fulfilled to ensure the story is complete)

The system has already calculated the method of election The results of the method and tally's are accurate and consistent with the rules

Definition of Done (what is required by the team before sending out for review)

Tiebreaking functionality is implemented and tested for fairness and accuracy

The coin toss method is validated and documented

The system can handle tiebreaks for different scenarios

The code is reviewed and tested by the development team

Effort: Small, Medium, Large, Extra Large (estimate of effort and time) OR number of hours needed

Small

PBI Author(s): Team 4

4.

As an Election Official

I want to run the CPL style of holding an election So that I can have the option run the proper voting

The system supports the (CPL) method of election

Election officials can select the CPL method as an option during the election setup process. The system will calculate the winner of the election using the CPL method based on voter preferences.

The results of the election using the CPL method are accurate and consistent with the rules of the method

Definition of Done (what is required by the team before sending out for review)

CPL election method is implemented and integrated into the system

The system can handle different election scenarios (e.g., multiple candidates, multiple seats, write-in candidates)

User interface and documentation are updated to include the CPL method as an option Code is reviewed and tested by the development team

Effort: Small, Medium, Large, Extra Large (estimate of effort and time) OR number of hours needed

Large

PBI Author(s): Team 4

5.

As an Election Official,

I want to insert multiple files in the terminal So that I can count multiple ballots from different files at once

I want to select and input multiple files containing ballots into the terminal.

The system reads and extracts the ballot data and merges the ballot data from all files into a single data structure for counting

The system accurately counts the votes for each candidate based on the merged ballot data

Definition of Done (what is required by the team before sending out for review)

Multi-file input functionality is implemented and tested for accuracy and efficiency The system can handle different scenarios (e.g., duplicate ballots, invalid file formats) The user interface is updated to include multi-file input as an option Code is reviewed and tested by the development team

Effort: Small, Medium, Large, Extra Large (estimate of effort and time) OR a number of hours needed

Large

PBI Author(s): Team 4

6.

As an Election Official,

I want to be able to run a popularity-only election So that we are able to handle ties through a coin toss

The system will calculate the winner of the election based on the candidate with the most votes

If two or more candidates have the same number of votes, the system will prompt the election official to perform a coin toss to break the tie

The results of the election using the popularity-only method are accurate and consistent with the rules of the method

Definition of Done (what is required by the team before sending out for review)

Popularity-only election method is implemented and integrated into the system User interface and documentation are updated to include the popularity-only method as an option

Unit tests are created and passed for the popularity-only method and tiebreaking functionality Code is reviewed and tested by the development team

Effort: Small, Medium, Large, Extra Large (estimate of effort and time) OR a number of hours needed

Medium

PBI Author(s): Team 4

7

As an Election Official,

I want to be able to have the system display the final results of the election on the terminal So that I can easily access and report the election outcomes

I want to display the final results of the election on the terminal after all votes have been counted

The results include the number of votes each candidate received, their ranking, and any relevant data like their party

The results are displayed in a clear and concise format that is easy to read and understand The system can handle different election scenarios (e.g., multiple candidates, multiple seats) The results are accurate and consistent with the rules and methods used in the election

Definition of Done (what is required by the team before sending out for review)

Final results display functionality is implemented and tested for accuracy and efficiency Unit tests are created and passed for the final results display functionality Code is reviewed and tested by the development team

Effort: Small, Medium, Large, Extra Large (estimate of effort and time) OR number of hours needed

Small

PBI Author(s) Team 4

8.

As an Election Official

I want to be able to import election ballots from a .csv file So that the election can be run using the proper ballot data

I want to select and import a .csv file containing PO election ballots

The .csv file is in the correct format and structure for the system to read and parse the ballot data

The system accurately counts the votes for each candidate based on the merged ballot data

Definition of Done (what is required by the team before sending out for review)

PO election ballot import functionality is implemented and tested for accuracy and efficiency. The user interface is updated to include PO election ballot import as an option. Code is reviewed and tested by the development team.

Effort: Small, Medium, Large, Extra Large (estimate of effort and time) OR number of hours needed

Small

PBI Author(s): Team 4

9

As a Election Official

I want to have a graphical user interface (GUI) for setting the date of the election So that I can easily input and update the election date

I would like a GUI component that allows election officials to input and update the date of the election

The GUI is easy to use and intuitive for election officials of different technical abilities

Definition of Done (what is required by the team before sending out for review)

GUI for setting the election date is implemented and tested for accuracy and efficiency. The user interface is updated to include the GUI component for setting the election date. The system can handle different scenarios (e.g., multiple elections, delayed elections). Code is reviewed and tested by the development team.

Effort: Small, Medium, Large, Extra Large (estimate of effort and time) OR number of hours needed

Large

PBI Author(s) Team 4

10.

As a Election Official

I want to be able see a table at the end of the election So that I can see the number of votes that the candidate added/subtracted for each IR round

A table is displayed at the end of of the election/program's runtime

Definition of Done (what is required by the team before sending out for review)

Data is accurate, the table closely follows the one shown in the document, and the functionality is properly tested.

Effort: Small, Medium, Large, Extra Large (estimate of effort and time) OR number of hours needed

Medium

PBI Author(s) Team 4

11.

As a Election Official

I want the IRV ballots to have at least half of the candidates ranked, rounded up from .5 or above to the next higher integer value

so that the ballots are valid

Acceptance Criteria (conditions that have to be fulfilled to ensure the story is complete)

All of the numbers are integers and no decimals or floats

Definition of Done (what is required by the team before sending out for review)

All ballots are valid and ranks are rounded up (or down) properly Properly tested, unit tested, integrated tested

Effort: Small, Medium, Large, Extra Large (estimate of effort and time) OR number of hours needed

Small

PBI Author(s) Team 4

As a Election Official

I want to be able to eliminate the candidate with the lowest amount of votes So that the votes can be redistributed to the other candidates

Acceptance Criteria (conditions that have to be fulfilled to ensure the story is complete)

After every round, if there is no tie, a candidate is eliminated

Definition of Done (what is required by the team before sending out for review)

Eliminate function removes the candidate with the lowest votes Properly tested, unit tested, integrated tested

Effort: Small, Medium, Large, Extra Large (estimate of effort and time) OR number of hours needed

Medium

PBI Author(s) Team 4

13.

As a Election Official

I want to be able to redistribute votes after a candidate gets eliminated So that one candidate eventually wins the election

Acceptance Criteria (conditions that have to be fulfilled to ensure the story is complete)

After a candidate is eliminated, the overall votes to each candidate should increase

Definition of Done (what is required by the team before sending out for review)

Function works properly such that after a candidate is eliminated, the votes should be redistributed to every candidate and also properly tested

Effort: Small, Medium, Large, Extra Large (estimate of effort and time) OR number of hours needed

Large

PBI Author(s) Team 4

14.

As a Election Official

I want to be able to run the files in a specific format So that I can tell apart IR and CPL headers

Acceptance Criteria (conditions that have to be fulfilled to ensure the story is complete)

Results state which election was run either CPL or IR

Definition of Done (what is required by the team before sending out for review)

The first line of the first file is checked to see whether it's CPL or IR voting format Properly tested, unit tested, integrated tested, and ensures that it outputs the correct election run

Effort: Small, Medium, Large, Extra Large (estimate of effort and time) OR number of hours needed

Small

PBI Author(s) Team 4