PBI 1 - PO voting type election

As an Election Official,

I want to be able to run a PO voting type election

So that one winner could chosen based on who received the majority of votes received

Acceptance Criteria: The candidate who received the most votes is chosen as the winner of the election.

Definition of Done: The voting system is tested and the acceptance criteria is met.

Effort: Large

PBI Author (s) Naviin Vejaya Kumar, John Cullom, Anna Frenz, Kyle Bekken

PBI 2 - PO voting results displayed on screen

As an Election Official,

I want to be able to see the PO stats of the election after the algorithm has finished running So that I can see who run the election

Acceptance Criteria:

- The PO stats are displayed when the election algorithm is done running.
- The stats have to have the winner, losers, and percentage of votes for each candidate.

Definition of Done: The voting system is tested and the acceptance criteria is met.

Effort: Small

PBI 3 - Processing ballots for PO

As an Election Official,

I want the program to be able to process the ballots for a PO election.

So that I do not have to process them manually.

Acceptance Criteria:

- The CSV file header and body is correctly processed by voting system
- Handle ballots without errors.

Definition of Done: The voting system is tested, the process is integrated into the voting system, and the acceptance criteria is met.

Effort: Medium

PBI Author (s) Naviin Vejaya Kumar, John Cullom, Anna Frenz, Kyle Bekken

PBI 4- Reading in the Input file for PO

As an Election Official,

I want the program to read in the data correctly from the ballot file for an PO election. So that the rest of the algorithm can run correctly.

Acceptance Criteria:

- Able to read the first line of the CSV file to determine the voting type.
- Able to determine the list of candidates based on the second line
- Able to determine the number of candidates based on third line
- Able to determine the ballot's choice of vote based on the structure of the lines for lines 4 and later

Definition of Done: The voting system is tested, the process is integrated into the voting system, and the acceptance criteria is met.

Effort: Small

PBI 5 - OPL algorithm runs correctly

As an Election Official,

I want to be able to calculate the results of an OPL election So that I know the winners of an OPL election

Acceptance Criteria:

The winners of an OPL election are successfully calculated for all cases including edge cases

Definition of Done: The voting system is tested, OPL_System_2 and OPL_System_3 test cases are passed, and the acceptance criteria is met.

Effort: Large

PBI Author (s) Naviin Vejaya Kumar, John Cullom, Anna Frenz, Kyle Bekken

PBI 6 - IRV algorithm audit file is produced correctly

As an Election Official,

I want to be able to view an audit file that shows the result of the IRV algorithm So that I can verify that the IRV election was run correctly

Acceptance Criteria:

- The audit file accurately reflects the IRV election algorithm's calculations

Definition of Done: The voting system is tested, IRV_System_3 test case is passed, and the acceptance criteria is met.

Effort: Medium

PBI 7 - Multiple election files are able to be processed

As an Election Official,

I want to be able to input multiple csv files into the system So that I can calculate the election that covers multiple balloting locations

Acceptance Criteria:

- Multiple csv files are able to be processed by the system

Definition of Done: The voting system is tested, IRV_System_3 and IRV_System 1 test cases are passed, and the acceptance criteria is met.

Effort: Large

PBI Author (s) Naviin Vejaya Kumar, John Cullom, Anna Frenz, Kyle Bekken

PBI 8 - IRV Remove Invalid Ballots

As an Election Official,

I want to be able to remove all invalid ballots

So that I can verify that the IRV election only accounts for valid ballots.

Acceptance Criteria:

- The IRV removes invalid ballots
- The algorithm ensures that at least half of the candidates are ranked and rounded up form .5 or above to the next highest integer values.

Definition of Done: The voting system is tested, IRV_System_3 test case is passed, and the acceptance criteria is met.

Effort: Medium

PBI 9 - IRV algorithm correctly identifies when a candidate has reached droop

As an Election Official,

I want to be able to calculate the results of an IRV election

So that I can know who won the IRV election

Acceptance Criteria:

- The IRV algorithm runs correctly for all cases including edge cases

Definition of Done: The voting system is tested, IRV_System_2 and IRV_System_4 test cases are passed, and the acceptance criteria is met.

Effort: Large

PBI Author (s) Naviin Vejaya Kumar, John Cullom, Anna Frenz, Kyle Bekken

PBI 10- GUI is displayed to election official

As an Election Official,

I want to be able to interact with a Graphical User Interface to upload the single/multiple CSV input files for an election

So that I can more easily interact with the voting system

Acceptance Criteria:

- The GUI allows election official to interact via mouse or arrow key
- The GUI allows election official to upload a single or multiple CSV input files
- The GUI allows election official to start an election

Definition of Done: The GUI is tested, GUI test cases are passed, and the acceptance criteria is met.

Effort: Large

PBI 11- Table is displayed at the end of an IRV election

As an Election Official,

I want to be able to see the number of votes subtracted and added to each candidate each round So that I can see how the election progressed round to round

Acceptance Criteria:

 A table is displayed at the end of the IRV election that shows each candidate and how many votes were added and subtracted towards them each round

Definition of Done: The voting system is tested and the acceptance criteria is met.

Effort: Medium