1.

User Story:
As an election official
I want the program to invalidate Ballots with less than half of the Candidates ranked when the Election type is STV
So that I no longer have to rely on the Ballot system to do this for me and so the invalid ballots aren't used in the election.

Acceptance Criteria/Definition of Done:
- Ballots with less than half of the Candidates ranked are invalidated
- This only happens when the Election type is STV
- The invalidated Ballots are not counted in the Election
- Passes all unit tests for above criteria

Effort:
Small

2.

User Story:
As an election official
I want a report saved to disk that stores all of the Ballots that are invalidated for an STV Election before the Ballots are counted
So that I know which Ballots were not counted in the Election and to prevent fraud.

Acceptance Criteria/Definition of Done:
- All Ballots that are invalidated have their information written to a file
- That file is saved to disk in the same directory as the voting application executable
- Passes all unit tests for above criteria

Effort:
Small

3.

User Story:
As an election official
I want to be able to search for Ballot files on disk and select them from a directory structure in a graphical user interface
So that I can find the Ballot files I want to use in under 2 minutes and the election officials don't need to memorize where the files are.

Acceptance Criteria/Definition of Done:

- The user is able to select one or more Ballot files from a directory structure in the interface
- Those files are used as the Ballot files processed in the Election
- The user is only able to select files with the .csv extension
- Passes all unit tests for above criteria

Effort:
Medium

4.

User Story:
As an election official
I want to be able to name the invalidated Ballots file to whatever I want and store it wherever I want in a graphical user interface
So that I know what it is called and where it is stored.

Acceptance Criteria/Definition of Done:
- The invalidated Ballots file is saved with the name that the user declared in the interface
- That file is saved in the location on disk that the user declared in the interface
- Passes all unit tests for above criteria

Effort:
Medium

5.

User Story:
As an election official
I want to be able to input the number of seats for the Election in a graphical user interface
So that I am able to interact with the program in a way that is familiar and learn how to use it in under 15 minutes

Acceptance Criteria/Definition of Done:
- The number of seats indicated in the interface is the number of seats used in the Election algorithms
- The number of seats should be a positive integer
- Passes all unit tests for above criteria

Effort:
Medium

6.

User Story:
As an election official
I want to be able to input the Election type in a graphical user interface
So that I am able to interact with the program in a way that is familiar and learn how to use it in under 15 minutes

Acceptance Criteria/Definition of Done:
- The Election type indicated is either "STV" or "Plurality"
- The type indicated is the voting algorithm that is run for the Election
- Passes all unit tests for above criteria

Effort:
Medium

7.

User Story:
As an election official
I want to be able to toggle the shuffle option in test mode in a graphical user interface
So that I am able to interact with the program in a way that is familiar and learn how to use it in under 15 minutes

Acceptance Criteria/Definition of Done:
- The Election type indicated is "STV"
- The voting application is being run in test mode
- The shuffle option indicated is either "True" or "False"
- If the shuffle option indicated is "True", then the Ballots for the STV Election are shuffled before the voting algorithm is run
- If the shuffle option indicated is "False", then the Ballots for the STV Election are not shuffled before the voting algorithm is run
- Passes all unit tests for above criteria

Effort:
Medium

8.

User Story:
As an election official

I want to be able to confirm the Election parameters in a graphical user interface
So that I am able to interact with the program in a way that is familiar and learn how to use it in under 15 minutes

Acceptance Criteria/Definition of Done:
- The Election indicated is "STV"
- The confirmation indicated is either "True" or "False"
- If the confirmation indicated is "False," the user will be directed to re-enter all inputs
- If the confirmation indicated is "True," the Election runs the voting algorithm.
- Passes all unit tests for above criteria

Effort:
Medium

9.

User Story:
As an election official
I want a short report generated to give to election certification officials that contains the date, Election type, the Candidates, the number of seats, and the winners of the Election
So that the Election can be verified without the audit file and the Election has record of when it occurred and its results

Acceptance Criteria/Definition of Done:
- The program generates report with only the above listed information
- The report is saved to disk in the same directory as the voting application executable
- Passes all unit tests for above criteria

Effort:
Small

10.

User Story:
As an election official
I want to be able to print the short election certification report right from the graphical user interface
So that I can have a hard copy of the report immediately and walk it over to the Election Certification Official

Acceptance Criteria/Definition of Done:
- Report is saved to disk before the user is given the option to print it
- The user is given the option to print the report in the GUI

- When the user clicks print, a print preview window is opened
- The user has the ability to select a destination printer in the print preview window
- When the user selects print inside the print preview window, the report is printed by the selected printer
- When the user selects print inside the print preview window, the print preview window closes
- The print option remains there for the user until they close the interface
- Passes all unit tests for above criteria

Effort:
Large

11.

User Story:
As an election official
I want to be able to add Ballots manually to the program to be counted in the Election in a graphical user interface
So that I can test out a small version of the system we would like to eventually deploy on voting machines

Acceptance Criteria/Definition of Done:
- The user is able to manually enter the ballot through a graphical user interface
- The system is able to check the validity of the ballot
- The ballot added can be processed in the same way that other ballots which are read in from the CSV files.
- Passes all unit tests for above criteria

Effort:
Large