As an election official who is unfamiliar with software architecture I want a more comprehensible README So that I can properly run the program

Acceptance Criteria

The README contains more detailed information about how to run the program in an Eclipse environment as well as thorough instructions for how to run the program in other environments.

Definition of Done

The README is fleshed out to go more in depth on the program.

Effort: Small

PBI Author(s): Sean Carter, Jack Soderwall, Conor Brown, Joe Cassidy

As an election official

I want full support for candidate/party names with spaces So that names can be entered in a more natural manner

Acceptance Criteria

Elections using candidates and parties with names containing spaces function as intended, names with spaces are properly displayed to the user, and names with spaces are properly written into the audit file.

Definition of Done

The Acceptance Criteria are satisfied, and its functionality is thoroughly tested via unit and systems testing.

Effort: Small

PBI Author(s): Sean Carter, Jack Soderwall, Conor Brown, Joe Cassidy

As an election official

I want to be able to run a popularity only election in addition to the other election types So that I can run elections of this type as required by the state's attorney.

Acceptance Criteria

The election is fair, any ties are broken via coin toss, and the popularity only election algorithm is implemented properly.

Definition of Done

The acceptance criteria have been met and validated via unit and system testing, and documentation has been produced to accompany the code.

Effort: Large

PBI Author(s): Sean Carter, Jack Soderwall, Conor Brown, Joe Cassidy

As an election official

I want to be able to bring in PO election files to the system

So that I can run popularity only elections as required by the state's attorney.

Acceptance Criteria

Files are able to be read into the system that have PO as their first line and they are in .csv format.

Definition of Done

The acceptance criteria have been met and validated via unit and system testing, and documentation has been produced to accompany the code.

Effort: Small

PBI Author(s): Sean Carter, Jack Soderwall, Conor Brown, Joe Cassidy

As an election official

I want to see the stats from a PO election displayed to the screen with each candidate's percentage of votes.

So that I know who won and who lost and so that voters can know how well their candidate did in the election.

Acceptance Criteria

Stats must be displayed to the screen, and these stats must include winners and losers as well as percentages of votes for each candidate.

Definition of Done

The code works as intended, and has been thoroughly tested via unit and system testing, and documentation has been produced to accompany the code.

Effort: Small

PBI Author(s): Sean Carter, Jack Soderwall, Conor Brown, Joe Cassidy

As an election official

I want to pass in multiple files to the system for a single election

So that election officials can bring in different files from different locations and run more than one election without having to completely restart the running of the software each time.

Acceptance Criteria

An election official is able to pass in multiple files to the system, the election type for each file is determined properly, and the election contained within each file is run properly (which is of course dependent on the exact election type).

Definition of Done

The code compiles and works properly for multiple files being passed in. Additionally, the code has been thoroughly tested via unit and system testing, and documentation has been produced to accompany the code.

Effort: Medium or Large

PBI Author(s): Sean Carter, Jack Soderwall, Conor Brown, Joe Cassidy

As an election official

I want a GUI as opposed to a text prompt

So that I can easily maneuver through the file system in order to find necessary files rather than having to know things such as file paths or names off of the top of my head.

Acceptance Criteria

The election official is able to successfully enter filename(s) through the GUI interface. The election official can browse for files on the disk via mouse and keyboard.

Definition of Done

The GUI compiles without errors and can successfully enter files into the system. Additionally, the code has been thoroughly tested and documentation has been produced to accompany the code.

Effort: Extra Large

PBI Author(s): Sean Carter, Jack Soderwall, Conor Brown, Joe Cassidy

As an election official

I want the IR Election ballots to be valid only if they list half of the candidates So that invalid ballots are not counted towards the election, as this was specified by state election officials.

Acceptance Criteria

Ballots are checked for their number of rankings, ballots with at least half of the candidates ranked are properly used within the election, and ballots without at least half of the candidates ranked are disqualified or tossed out, thus not being used in the progression of the election. Furthermore, a file needs to be created with the invalidated ballots for audit purposes and it should be named invalidated_dateofelection.xxx.

Definition of Done

The acceptance criteria have been satisfied, and the code has been thoroughly tested and refactored via unit and system testing, and documentation has been produced to accompany the code.

Effort: Medium

PBI Author(s): Sean Carter, Jack Soderwall, Joe Cassidy, Conor Brown

As an election official

I want the progression of an IR election to be displayed as a table at the end of the election So that I have a clear, concise, and visual representation of the election, rather than having to

parse through dense audit files to gain this understanding.

Acceptance Criteria

The table is displayed to the screen, election statistics are displayed for each round, statistics include votes gained by round, vote totals for each round, and clearly show when candidates are eliminated. The table should also be easy to read, and likely color coded.

Definition of Done

Code is thoroughly tested via unit and systems testing, and proper documentation has been produced to accompany the code.

Effort: Large

PBI Author(s): Sean Carter, Joe Cassidy, Jack Soderwall, Conor Brown

As an election official

I want a report file containing general election statistics

So that I have a printable version of election statistics to give to election certification officials. Note: We are interested in functionality and not the individual tasks for the PBI. Do not create tasks at this time.

Acceptance Criteria

General election statistics are written to a file, this file is printable, and the election statistics include the date, election type, candidates, number of seats, and winners of the election. There should also be no unnecessary information on this report.

Definition of Done

The acceptance criteria are implemented and have been verified via unit and system testing, and documentation has been created for the code.

Effort: Small

PBI Author(s): Sean Carter, Joe Cassidy, Jack Soderwall, Conor Brown