As an election official, I want the null pointer bug to be fixed in the plurality algorithm because we can't do updates until that code is fixed

Acceptance and Done Criteria:

All unit and system tests run without a null pointer exception.

Effort: Medium

As an election official, I want the system to use a graphical user interface for the user input to increase ease of use.

Acceptance and Done Criteria:

Users are able to input the necessary information to start an election into a GUI Necessary information includes election type, number of seats, and location of ballots

Effort: Medium

As an election official, I want the system to use a graphical user interface to select files from a directory structure.

Acceptance and Done Criteria:

Users are able search and select a file from a directory structure GUI

Effort: Small

As an election official, I want the software to determine which ballots are invalidated because the parameters for STV Election ballot validation have become more stringent.

Acceptance and Done Criteria:

Unit and system tests indicate that invalid ballots have been found.

Effort: Small

As an election official, I want the software to remove invalidated files from the election because the parameters for STV Election ballot validation have become more stringent.

Acceptance and Done Criteria:

Unit and system tests indicate that invalid ballots are successfully removed.

Effort: Small

As an election official, I want the invalidated ballots to be shown in a report for auditability.

Acceptance and Done Criteria:

A report is successfully generated when invalid ballots are given to an STV election.

Effort: Small

As an election official, I want the invalidated ballots report to be named and saved through a graphical user interface for ease of use.

Acceptance and Done Criteria:

Users are able to save a file within a directory structure GUI.

Effort: Small

As an election certification official, I want to make a short, printable report containing the pertinent results of the election, which will make presentation of results smoother.

Acceptance and Done Criteria:

Unit testing indicates that a report file is created and contains the necessary information.

Effort: Small

As an election certification official, I want the short printable report to have a print option within the program to make printing the results easier.

Acceptance and Done Criteria:

Through manual testing by a tester, the report is able to be printed with the print button. Operating system's print dialogue is shown when the print button is selected.

Effort: Small

As an election official, I would like to be able to have the ballots input on the screen directly into the program to make the addition of voting machines easier to integrate into the system in the future.

Acceptance and Done Criteria:

The manually inputted ballots are included in the election.

System testing indicates that the manual input of ballots integrates into the existing election system.

Effort: Large

As an election official, I would like to have an alternative GUI for the main screen of the program where ballots can be entered directly on the screen to prototype the visual appearance of a possible future system that uses multiple machines.

Acceptance and Done Criteria:

An interactive GUI is usable

Effort: Medium