Note: After further clarification with the Professor, we removed PBI 6 from our backlog. However, we didn't have our sheet anymore to make the corresponding change hence the discrepancy between the in class worksheet and our product backlog.

PBI 9 - IRV algorithm

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 correctly calculates ballots for all cases including edge cases
- An accurate result file is produced when a valid election is done being run
- An accurate audit file is produced when a valid election is done being run
- The currect results are outputted at the end of the election onto the screen
- The algorithm is able to process 100,000 ballots in under 8 minutes.

Definition of Done:

- Passes all system integration systems
- Passes all unit tests
- Meets all acceptance criteria items
- Code has been refactored
- Able to demo feature
- Necessary Documentation has been completed including Javadocs and test logs

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:

- Statistics are displayed to the screen at the end of every valid PO election run
- The statistics include the names of all candidates
- The statistics designate which candidate is the winner
- The statistics designate which candidates are losers
- The statistics contain the percentage of votes that each candidate received.
- The statistics are correct and correspond to the audit file information

Definition of Done:

- Passes all system integration systems
- Passes all unit tests
- Meets all acceptance criteria items
- Code has been refactored
- Able to demo feature
- Necessary Documentation has been completed including Javadocs and test logs

Effort: Small

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:

- A GUI window appears when system is launched
- A file in the directory can be found by typing in the file name to the GUI
- A file in the directory can be looked for using a mouse
- A file in the directory can be looked for using arrow keys
- A single CSV input file can be selected and uploaded using GUI
- Multiple CSV input files can be selected and uploaded using GUI

Definition of Done:

- Passes all system integration systems
- Passes all unit tests
- Meets all acceptance criteria items
- Code has been refactored
- Able to demo feature
- Necessary Documentation has been completed including Javadocs and test logs

Effort: Large

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

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:

- Table contains a row for each candidate
- There is a column for each round of IRV calculations
- The table contains the amount of votes each candidate has at the end of each round
- The table contains the change in votes counting towards each candidate after each round is completed.
- The table is displayed in the terminal every time a valid IRV election is run
- The information contained in the table is correct and corresponds to the information contained in the audit and results files.

Definition of Done:

- Passes all system integration systems
- Passes all unit tests
- Meets all acceptance criteria items
- Code has been refactored
- Able to demo feature
- Necessary Documentation has been completed including Javadocs and test logs

Effort: Medium

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