### Team 25: Product Backlog

As an election official

**I want** to be able to see the statistics, and percentage of votes on my screen **So that** I can view them during the PO election processing.

Acceptance Criteria (conditions that have to be fulfilled to ensure the story is complete)

1. I can see the stats displayed on the screen when the PO election is running.

Definition of Done (what is required by the team before sending out for review)

1. Display of PO election stats/calculations are displayed to the terminal in PO processing.

Effort: Large

PBI Author(s): Elias

As an election official

I want a popup window when I run the program

So that I can easily select multiple files

Acceptance Criteria (conditions that have to be fulfilled to ensure the story is complete)

- 1. Use my mouse and arrow keys
- 2. Window displaying all available files
- 3. Select multiple files
- 4. Submit files

Definition of Done (what is required by the team before sending out for review)

- 1. Searching for a file opens up file explorer
- 2. Validates csv files
- 3. Have to select at least one file
- 4. Able to interact with GUI immediately after execution
- 5. Gui can be closed before election processing finishes

Effort: Extra Large

PBI Author(s): Everyone

As an election official

I want to select files from a popup window

So that I can choose multiple files to run an election with.

## Acceptance Criteria

- 1. There's a window I can interact with
- 2. I can select multiple files
- 3. I can press a button to submit the files I selected

## **Definition of Done**

- 1. GUI displays all files available for use
- 2. User can select multiple files
- 3. A button on the GUI can be pressed to submit the selected files for processing

Effort: Large

PBI Author(s): Ashton

8

### **As** an election official

I want a file that records the ballots that were invalid **So that** invalid ballots can be stored somewhere.

# Acceptance Criteria

- 1. A file is created for storing invalid ballot information
- 2. The file is named invalidated\_dateofelection.xxx

### Definition of Done

- 1. A file for writing to is created in the product directory
- 2. The file is named invalidated dateofelection.xxx

Effort: Small

PBI Author(s): Ashton

As an election official

I want invalid ballots to have their information written to a file **So that** I can see the invalid ballots for audit purposes.

Acceptance Criteria

1. Information from every invalid ballot is stored in a file

Definition of Done

1. The invalid ballots get written to the file invalidated dateofelection.xxx

Effort: Medium

PBI Author(s): Ashton

# 3b (Calculating percentage of votes)

**As** an election official

I want percentage of votes calculated displayed

So that I can see distribution of votes

Acceptance Criteria

1. Distribution of votes displayed to the screen

Definition of Done

- 1. Calculate percentage of votes for each candidate
- 2. Display the distribution of votes to the screen

Effort: Medium

PBI Author(s): Garrett

As an election official

I want the program to only need the files and the date

So that I don't waste my time doing manual input.

Acceptance Criteria (conditions that have to be fulfilled to ensure the story is complete)

- 1. Program takes file input.
- 2. Program can ask for the day's date.

Definition of Done (what is required by the team before sending out for review)

- The interface only returns the filenames to the program.
- Do not need date input, can use a library.

Effort: Small

PBI Author(s): Caleb Tracy

As an election official

I want insurance that all ballots have at least half the candidates ranked **So that** invalid ballots are not counted.

Acceptance Criteria (conditions that have to be fulfilled to ensure the story is complete)

1. Before any ballot processing, ballots with less than half the candidates ranked are removed.

Definition of Done (what is required by the team before sending out for review)

- When IRV processing is called, a new helper functions loops through the ballots, identifying ballots that have greater than 50% of candidates ranked (0.5).
- Invalid ballots are removed from the ballots array, and the total number of ballots is updated.
- Unit testing for the helper function, and a new integrated test with invalid ballots.

**Effort:** Medium

PBI Author(s): Caleb Tracy

### 7a

**As** an election official

I want a gui to interact with

**So that** I do not have to give inputs through a terminal

Acceptance Criteria (conditions that have to be fulfilled to ensure the story is complete)

- 1. The interface is beautiful and easy to use.
- 2. The interface appears every time the program is started.
- 3. Closing the interface ends the program's task.

Definition of Done (what is required by the team before sending out for review)

- Create a gui that appears on startup.
- Gui has the capability to be minimized and closed.
- Closing the gui interrupts the program.

Effort: Large

PBI Author(s): Caleb Tracy