

## **PRODUCT BACKLOG TEAM #001**

### #1 NEW TYPE OF ELECTION

As an election official,  
I want to be able to obtain the results for a new type of election (PO) bringing a new type of csv file,  
So that I can use the same program to compute multiple types of elections.

#### Acceptance Criteria

- Ability to correctly identify a PO election file.
- Ability to read a CSV.
- Ability to read the correct number of ballots and candidates.
- Fair resolution of ties.

#### Definition of Done

- Passes all new election type tests.
- Working demo.

Effort: Large

PBI Author(s): Adrian Leal

## #2 CSV FILE FOR PO ELECTION

As an election official,  
I want the PO election ballots to be brought in via a .csv file in the system,  
So that the election can be run.

### Acceptance Criteria:

- Must be able to read in a .csv PO election file to run the election.
- The format of the file must be as provided.

### Definition of Done:

- Passes all unit tests that reads in a .csv file for PO.
- Passes all regression tests.
- Passes all system integration tests.

Effort: Small

PBI Author(s): Sar Kanotra

### #3 DISPLAY PO STATS TO SCREEN AT END OF ELECTION

As an election official,  
I want to see the statistics of the election,  
So that I can certify and validate the election.

#### Acceptance Criteria:

- Ability to view percentage of votes each candidate has received on screen at the end of each election.
- Stats include winners and losers.

#### Definition of Done:

- Passes all regression testing.
- Passes all system integration testing.

Effort: Large

PBI Author(s): Estifanos Alene

#### #4 BRING IN MULTIPLE FILES

As an election official,  
I want to bring in multiple files instead of a single one,  
So that I can bring in different files from different balloting locations.

##### Acceptance Criteria:

- Must be able to read in multiple files from different balloting locations.
- Must follow the same format of the election file.

##### Definition of Done:

- Passes all regression tests to bring in multiple files.
- Passes all unit tests.
- Passes all system integration tests.

Effort: Medium

PBI Author(s): Sar Kanotra

## #5 SIMPLE GUI FOR FILE INPUT

As an election official,  
I want to have some kind of graphical user interface to input the election files,  
So that I can visually see the file I am importing to the system.

### Acceptance Criteria

- A simple GUI appears when the 'load' option is entered.
- The GUI can successfully read the user input and load the file to the system.
- The correct type of election is run and the results of the election are as expected.

### Definition of Done

- GUI has been tested with multiple types of file and loads them correctly.
- Working demo of the system using the GUI to read the election file.

Effort: Medium

PBI Author(s): Adrian Leal

## #6 VALIDATE BALLOTS FOR IRV ELECTION

As an election official,  
I want the invalid ballots to be thrown out of the election,  
So that each election is fair and validated.

### Acceptance Criteria:

- The ballots that have less than 0.5 candidates ranked are invalidated.
- Invalidated ballots are removed from election.

### Definition of Done:

- Passes all regression tests to validate ballots.
- Passes all unit tests.
- Passes all system integration tests.

Effort: Medium/Large

PBI Author(s): Estifanos Alene

## #7 CREATE AUDIT FILE FOR INVALID BALLOTS IN IRV ELECTION

As an election official,  
I want the invalidated ballots to be added to an audit file,  
So that each election is ensured to be fair and validated.

### Acceptance Criteria:

- The invalidated ballots show up in the audit file.
- The audit file is named in the format `invalidated_dateofelection.xxx`.

### Definition of Done:

- Passes all regression tests to add invalid ballots to an audit file.
- Passes all unit tests.
- Passes all system integration tests.

Effort: Medium/Large

PBI Author(s): Estifanos Alene

## #8 DISPLAYING IRV ELECTION RESULTS IN A TABLE

As an election official,  
I want to see a table at the end of the IRV election,  
So that the data of the election is visualized.

### Acceptance Criteria:

- The table should show each round of the IRV election and the number of votes that the candidate added or lost for that round. The table should be displayed to the screen.

### Definition of Done:

- The program will output a table that shows the IRV election results round by round showing the number of votes each candidate added or subtracted in the respective round.

Effort: Medium

PBI Author: Parker Oberstar



## #9 SHORT REPORT DISPLAYED

As an election official,  
I want a short report that can be printed,  
so that I can give this to the election certification officials.

### Acceptance Criteria:

- The report should have the date, type of election, IR or OPL, the candidates, the number of seats, and the winner(s) of the election. Only the pertinent information is on this report.

### Definition of Done:

- The program generates a printable report containing the date, type of election, the candidates, the number of seats, and the winner(s) of the election.

Effort: Medium

PBI Author: Parker Oberstar

## #10 DISPLAY NAME OF THE LOADED FILE

As election official,  
I want to be able to see the file that was loaded to the system,  
So that I can modify it if the wrong file was loaded.

### Acceptance Criteria

- Terminal prints the name of the file loaded to the system

### Definition of Done

- Passes all tests where different files are loaded to the system
- Working demo

Effort: Small

PBI Author(s): Adrian Leal

## #11 BUG 1

As the product owner,  
I want the missing pair of ">>" on the terminal to get fixed while running the system,  
So that the election system can operate correctly and efficiently.

### Acceptance Criteria:

- Must be able to display the missing characters while running the system.
- Must be able to work with any type of election.

### Definition of Done:

- Passes all regression tests to display the characters to the screen.
- Passes system integration test.

Effort: Small

PBI Author(s): Sar Kanotra

#12 BUG 2

As the product owner,  
I want reading in the first line of IR to get fixed in the system,  
So that the election can operate correctly and efficiently.

Acceptance Criteria:

- Must be able to read in the first line of IR correctly.

Definition of Done:

- Passes all regression tests to display the characters to the screen.
- Passes system integration test.

Effort: Medium

PBI Author(s): Sar Kanotra

#13 BUG 3

As the product owner,  
I want to fix the number of ballots in the tester class for OPL election,  
So that the tester class can operate correctly and efficiently.

Acceptance Criteria:

- Must be able to read in the correct ballots for OPL in the tester class.

Definition of Done:

- Passes all regression tests to display the characters to the screen.
- Passes system integration test.

Effort: Medium

PBI Author(s): Sar Kanotra