## **PBI 1:**

As an election official

I want to be able to input multiple files at once

So that I can see the results of many files at once.

Note: We are interested in functionality and not the individual tasks for the PBI. Do not creat

Acceptance Criteria:

Able to input many files at once

No errors when inputting files

Definition of Done:

Code is working properly and as expected.

No bugs.

All unit testing is done.

All system testing is done.

All documentation is done.

Documentation is clear and understandable.

Code has been reviewed by others.

Effort: Medium

PBI Author(s): Jackie Li

# PBI 2:

As election official

I want to be able to process an IR file

So that I can easily check the winner of an IR election

Acceptance Criteria:

Processes an IR file.

Does not have any errors

Definition of Done:

Code is working properly and as expected.

No bugs.

All unit testing is done.

All system testing is done.

All documentation is done.

Documentation is clear and understandable.

Code has been reviewed by others.

Effort: Small

PBI Author(s): Jackie Li

# PBI 3:

As an election official

I want to be able to process a CPL file

So that I can easily check the winner of a CPL election

Acceptance Criteria:

Processes an CPL file.

Does not have any errors

Definition of Done:

Code is working properly and as expected.

No bugs.

All unit testing is done.

All system testing is done.

All documentation is done.

Documentation is clear and understandable.

Code has been reviewed by others.

Effort: Small

PBI Author(s) Jackie Li

## PBI 4:

As election official

I want have a user friendly interface

So that I can easily understand and input the files I want

Acceptance Criteria -

Interface for inputting files is understandable and simple

No errors when inputting the correct files

Definition of Done:

Code is working properly and as expected.

No bugs.

All unit testing is done.

All system testing is done.

All documentation is done.

Documentation is clear and understandable.

Code has been reviewed by others.

Effort: Large

PBI Author(s): Jackie Li

#### PBI 5:

As an election official

I want to be able to input a CSV

So that I can easily check the winner of an election

Acceptance Criteria:

Able to input a CSV.

Any of the three types of CSV

Definition of Done:

Code is working properly and as expected.

No bugs.

All unit testing is done.

All system testing is done.

All documentation is done.

Documentation is clear and understandable.

Code has been reviewed by others.

Effort: Small

PBI Author(s) Jackie Li

# PBI 6

As an election official

I want to be able to search for files

So that it is easy to find the files I need

Acceptance Criteria:

A working search bar is added to the system

Definition of Done:

A search bar has been added,

Passes all unit tests, and is well documented

Effort: Medium

PBI Author(s): Dominic Deiman

## PBI 7

As an election official

I want to use the arrow keys to look for files So that I can quickly find the file I need

Acceptance Criteria:

User can navigate the files with arrow keys

Definition of Done:

Arrow key controls are added to the system,

Pass all unit testing,

And added code is well documented

Effort: Small

PBI Author(s): Dominic Deiman

## **PBI 8**

As an election official

I want ballots to be checked based on the rules of the election

So that the election is fair and has integrity

Acceptance Criteria:

There are checks in the code to ensure the ballots are valid based on the requirements.

Definition of Done:

Validation checks are added in the code to make sure ballots are valid.

The added code passes all unit testing,

and is well documented.

Effort: Small

PBI Author(s): Dominic Deiman

As an election official

I want the list of candidates to be correct from the file

So that the election is fair and accurate

Acceptance Criteria:

The candidate names from the entered file should be correctly read in.

Definition of Done:

The code that reads the list of candidates from the csv file should be working, pass all unit testing,

and be well documented.

Effort: Small

PBI Author(s): Dominic Deiman

# **PBI 10**

As election official

I want the remaining seats after the first round to be assigned randomly So that we can continue the voting process

Acceptance Criteria:

The seats are assigned randomly.

Definition of Done:

The process can move forward without error after the seats are properly assigned.

Passes all unit testing, and is well documented.

Effort: Medium

PBI Author(s): Alex Grenier

#### **PBI 11**

As election official

I want ties to be handled fairly.

So that we can determine winners from the tied scenario

Acceptance Criteria: Determined ties are broken.

Definition of Done: A winner is chosen from a tie-breaking scenario.

Passes all unit testing, and is well documented.

Effort: Medium

PBI Author(s): Alex Grenier

## **PBI 12**

As election official

I want to produce an audit file

So that we can record the processed data

Acceptance Criteria: Audit file is created and can be manipulated.

Definition of Done: Created audit file incorporates processed data.

Passes all unit testing, and is well documented.

Effort: Small

PBI Author(s): Alex Grenier

#### **PBI 13**

As election official

I want to view a table at the end of the IRV process

So that I can visibly see what has been done

Acceptance Criteria: Table is created for viewing

Definition of Done: Table incorporates all of the information processed in the IRV system.

Passes all unit testing, and is well documented.

Effort: Large

PBI Author(s): Alex Grenier

### **PBI 14**

As an election official

I want a Popularity Only (PO) algorithm

So that a single winner can be determined based on the candidate receiving the most ballot

Acceptance Criteria: The algorithm can determine the candidate with the most votes.

Definition of Done: The PO voting algorithm has been developed and tested. Documentation for the algorithm has been created. The algorithm has been integrated

with the existing voting systems.

Effort: Large

# PBI Author(s) Aahan Tyagi

## **PBI 15**

As an election official

I want the Popularity Voting algorithm to handle ties fairly, So that the election results are accurate and unbiased even in the event of a tie.

Acceptance Criteria The PO voting algorithm should determine the candidates with the tied votes

Definition of Done The algorithm for breaking ties has been developed and tested. Documentation for the algorithm and tie-breaking method has been created. The algorithm and tie-breaking method have been integrated with the existing systems.

Effort: Medium

PBI Author(s) Aahan Tyagi

#### **PBI 16**

As an election official

I want the Popularity Only voting algorithm to generate an audit file So that the election results can be audited and verified for accuracy and integrity.

Acceptance Criteria: The PO voting algorithm should generate an audit file that records all relevant data related to the election (e.g. number of votes cast, candidate names, vote counts, tie-breaker method used, etc.).

Definition of Done: The audit file functionality has been developed and tested. Documentation for the audit file has been created. The audit file functionality has been integrated with existing voting systems.

Effort: Small

PBI Author(s) Aahan Tyagi

## **PBI 17**

As an election official,

I want to be able to view statistics at the end of a Popularity Only (PO) election, So that I can analyze the results and gain insights into the election.

Acceptance Criteria: The PO voting algorithm should provide statistics such as the number

of votes cast, voter turnout, candidate vote counts, and any tie-breaker methods used.

Definition of Done: The statistics functionality has been developed and tested. Documentation for the statistics has been created. The statistics functionality has been integrated with existing voting systems

Effort: Medium

PBI Author(s) Aahan Tyagi