PBI 1: As Jody, the product owner,

I want the previous 2 election types to work as aforementioned,

so that we can use these types of elections because the secretary of state has determined that they will run IRV and OPL elections in the future.

Acceptance Criteria: Both Instant Runoff and Open Party List voting algorithms will fully work as previously described.

Definition of Done: Elections of both types are run without error, correct information regarding winners is displayed to the screen, and media and audit files are produced.

Effort: Small (<1 hr)

PBI Author(s): Trevor, Ioana, Cole, Tom

PBI 2: As an Election Official,

I want to be able to run a PO election,

so that we can use this type of election because the secretary of state has determined that we will run PO elections in the future.

Acceptance Criteria: A PO election is properly run and a single winner is chosen.

Fair coin toss is used to break ties.

Definition of Done: PO election is run without error, correct information is displayed to the screen via the GUI, and correct information is included in the audit/media files. This does not break other election types.

Effort: Extra Large (<20hrs)

PBI 3: As an election official,

I want the program to be able to process the ballots,

so that the program can determine the results of the PO election.

Acceptance Criteria: The software must be able to handle PO ballots in .csv file format.

Definition of Done: A PO election file can be input into the system and the file can be properly processed.

Effort: Medium (<2hr)

PBI 4: As an election official,

I want to see the PO results in a format that I can understand,

so that constituents who voted know how well their candidate did in the election.

Acceptance Criteria: PO stats will be displayed to the screen.

Definition of Done: The percentage of votes each candidate received will be displayed on the screen.

Effort: Small (<1 hr)

PBI 5: As an election official,

I want to be able to account for ballots from different locations,

so that all ballots are counted.

Acceptance Criteria: The software must be able to handle multiple files.

Definition of Done: All three election algorithms will work if we are given the ballots in different files.

Effort: Large (<5 hr)

PBI 6: As an election official,

I want a screen to show where I can input the election file(s),

so it is easier for me to use.

Acceptance Criteria: The software must be able to have GUI to intake election

files.

Definition of Done: A GUI pops up for a user to be able to input an election file,

the file is processed correctly, and the election is aggregated correctly.

Effort: Small (<1 hr)

PBI 7: As an election official,

I want to know when a ballot has been invalidated,

so we can ensure a fair election.

 $\textbf{Acceptance Criteria:} \ A \ file \ needs \ to \ be \ created \ that \ stores \ the \ invalidated$

ballots for audit purposes. The name of the file should be

 $invalidated_date of election.xxx.$

Definition of Done: Table is displayed to the screen and it matches the format

displayed in the project 2 writeup.

Effort: Medium (<2 hr)

PBI 8: As an election official,

I want to see the IRV results in a format that I can understand,

so that I can explain to news agencies how the election took place.

Acceptance Criteria: IRV stats will be displayed to the screen in a tabular

format.

Definition of Done: The table displayed to the screen is correct, and matches

the format shown in the project write up, and shows the correct steps taken in

the IRV election.

Effort: Large (<5 hr)

PBI 9: As an election official,

I want a report,

so I can give it to election certification officials.

Acceptance Criteria: The report should only have the date, type of election, IR

or OPL, the candidates, the number of seats, and the winner(s) of the election.

Definition of Done: The correct file is generated and it has a unique identifier.

Effort: Small (<1 hr)