Name, x500
Sai Tallapragada, talla037
Samuel Wong, wong0613
Andy Chen, chen6640
Sree Pemma, pemma003

Name: PBI1
As: An election official **I want:** To be able to bring in multiple files at the same time **So that:** I can run multiple elections with ballots from different locations
Acceptance Criteria: The user is able to input more than one election file for ballots when the program prompts them to and it executes each election file correctly with no errors thrown.
Definition of Done: Passes all regression tests Passes all system tests
Effort: medium(4 hrs)
PBI Author(s): Sai Tallapragada

Name: PBI2
As: An election official **I want:** to be able to see a table displayed to the screen after an election, showing each round of the election and how many votes each candidate lost/gained **So that:** I can more easily see how the election progressed after it is completed.
Acceptance Criteria: The user is able to see a table with a summary of the election statistics after the program is finished running.
Definition of Done: Passes all system tests Passes all regression tests Passes all unit tests
Effort: 6 hours
PBI Author(s): Sai Tallapragada

Name: PBI3
As: An election official **I want:** PO stats displayed to the screen at the end of the election. I want to know the percentage of votes each candidate received. **So that:** I know who won and who lost as well as the constituents who voted know how well their candidate did in the election.
Acceptance Criteria: The program correctly displays relevant information on who won to the screen after the election finishes running.
Definition of Done: Passes all regression tests Passes all system tests
Effort: Medium(2-4 hours)
PBI Author(s): Sai Tallapragada

Name: PBI4
As: An election official **I want:** The system to only count IRV ballots with over half the candidates ranked towards the election and reject the ones that don't have that. **So that:** Ballots that have less than half (rounded up) of their candidates ranked won't count towards the election as specified by state election officials.
Acceptance Criteria: The election can be run correctly by only counting the IRV ballots with at least half the candidates ranked and not counting the rest that don't have half.
Definition of Done: Passes all unit tests Passes all system tests Passes all regression tests
Effort: Medium (3-4 hours)
PBI Author(s): Andy Chen

Name: PBI5
As: An election official **I want:** The system to store the invalidated IRV ballots in a file. **So that:** It can be used for audit purposes post election.
Acceptance Criteria: All the IRV ballots that are invalidated during an election are tracked and they are stored in a file accessible by the election official for their purposes.
Definition of Done: Passes all unit tests Passes all system tests Passes all regression tests
Effort: Small (2-3 hours)
PBI Author(s): Andy Chen

Name: PBI6
As: An election official **I want:** To be able to operate the system via. a graphical user interface instead of through a text prompt **So that:** It's more convenient, quick, and less error prone to operate the system
Acceptance Criteria: The system has a GUI that has all the functionality of the system operated through a text terminal in GUI form.
Definition of Done: Passes all unit tests Passes all system tests Passes all regression tests
Effort: Large (perhaps 6+ hours)
PBI Author(s): Andy Chen

Name: PBI7
As: An election official **I want:** To be able to determine a single winner in an election based on the candidates receiving the most ballots with a fair coin toss if there is a tie or ties between candidates **So that:** I am able to run a PO election
Acceptance Criteria: The election official is able to clearly determine who the winner is in an election based on popularity and tie breaking with our PO election.
Definition of Done: Passes all system tests Passes all regression tests Passes all unit tests
Effort: Medium to Large- Time: 3-6 hours
PBI Author(s): Sree Pemma

Name: PBI8
As: An election official **I want:** To be able to bring in PO election ballots via a csv format **So that:**I am able to run a PO election with a csv file
Acceptance Criteria: The PO election is able to run successfully with the input of a csv file that contains the PO ballots to run the election and reads in ballot information correctly.
Definition of Done: Passes all unit tests Passes all regression tests Passes all system tests
Effort: Small (2 hours)
PBI Author(s): Sree Pemma

Name: PBI9
As: Jody **I want:** To be able to run a fair OPL election using a file containing ballot info. **So that:** I can automatically run OPL elections since that's a type of election my region uses.
Acceptance Criteria: OPL elections are able to be run without throwing errors and correctly distribute seats to the corresponding parties.
Definition of Done: Passes all system tests Passes all regression tests
Effort: medium (3-4 hours)
PBI Author(s): Sree Pemma, Samuel Wong

Name: PBI10
As: Jody **I want**: Seats to be correctly distributed to parties if one party wins more seats than candidates **So that**: An OPL Election can be run without error for different numbers of candidates/parties
Acceptance Criteria: An OPL Election where one party wins more seats than they have candidates can execute correctly without error. The extra seats should correctly be redistributed to the next party in line.
Definition of Done: - Passes all system tests. - No errors are thrown when passing in files where one party wins more seats than the number of candidates they have
Effort: Small (1-2 hours)
PBI Author(s): Samuel Wong

Name: PBI11

As: Jody
I want: The software to run correctly for an OPL Election given a large file size of around 100,00 ballots.
So that: A fair OPL election can be run and seats correctly distributed regardless of file size

Acceptance Criteria:

When the program is given an OPL Election file with around 100,000 ballots, the program does not throw any errors and distributes seats correctly.

Definition of Done:

- Passes all system tests.
- No errors are thrown when passing in test files of large sizes
- Seats are distributed correctly

Effort: Small(2 hours)

PBI Author(s): Samuel Wong