

Team 014 : Bilal Osman, Liam O'Neil, Hyehwan Ryu, Soorya Sundravel

Ranking:

1. CPL remainder tie breaker - 1 hr
2. Add date to audit file - 1 hr
3. Multiple file inputs - 30 min
4. Multiple File Processing: CPL - 1 hr 30 min
5. Multiple File Processing: IR/Remove Invalid IR Ballots - 1 hr
6. IR table - 3 hrs
7. PO candidate class - 1 hr
8. Multiple File Processing: PO Ballots - 1 hr
9. PO Election Class - 2 hr 30 min
10. PO tie breaker - 30 min // 13 hrs - remaining: 51 hrs

As an election official I want to use a tie-breaker to choose a candidate to allocate remainder votes to in CPL So that there will always be only one candidate chosen fairly
Acceptance Criteria: A candidate is chosen out of a number that has the same remaining votes.
Definition of Done: When reallocating votes based on remainder votes in CPL, the algorithm picks a candidate from a pool of candidates with the same remainder of votes via a tiebreaker.
Effort: Small
PBI Author(s): Bilal Osman

As an election official I want to add a date of an election to an audit file So that I know when the ballots were counted for a particular election
Acceptance Criteria: Save a date of an election to an audit file
Definition of Done: Successfully adds a date of an election to an audit file
Effort: Small
PBI Author(s): Hyehwan Ryu, Bilal Osman

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As an election official I want to be able to process multiple files So that I can combine voting ballots from multiple election sites
Acceptance Criteria: The program will include ballots from all files given to the program as well as header information all files share.
Definition of Done: Before parsing any files and counting ballots, the program must parse header information from a singular file to represent the election being simulated, then all files will be processed sequentially and the ballots will be collected from each and stored together.
Effort: Medium
PBI Author(s): Bilal Osman, Hyehwan Ryu, Soorya Sundravel

As an election official I want to have remove ballots with less than half of the candidates ranked in Instant Runoff Voting (IR) So that I can run an election with only valid ballots
Acceptance Criteria: Ballots that do not have half of the candidates ranked at least are not counted and the invalid ballots are shown in audit file.
Definition of Done: Collects ballots that are not valid by counting if less than half of the candidates are ranked. The invalid ballots will be saves in a data structure later put into the audit file.
Effort: Low
PBI Author(s): Bilal Osman, Hyehwan Ryu, Soorya Sundravel

<p>As an election official I want to be able to see IRV table of election results in a window So that I can see how election is simulated and calculated in an ordered format</p>
<p>Acceptance Criteria: A table displays all of the election rounds and allocations as well as candidate rankings per round on the screen through a table.</p>
<p>Definition of Done: The class is able to contain all election information done through simulation loop or rounds and is able to present that data as a table which is shown on the GUI.</p>
<p>Effort: Large</p>
<p>PBI Author(s): Bilal Osman, Soorya Sundravel</p>

<p>As an election official I want Popularity Only (PO) voting algorithm So that I can select a winning candidate with the most votes</p>
<p>Acceptance Criteria: The election simulation is able to gather all ballots and display the winner of the election based on popularity.</p>
<p>Definition of Done: Select a winner based on the candidate receiving the most ballot by counting up ballots per candidate.</p>
<p>Effort: Medium</p>
<p>PBI Author(s): Bilal Osman, Hyehwan Ryu, Soorya Sundravel</p>

<p>As an election official I want an unbiased system to break ties in Popularity Only Voting (PO) So that I can select a winning candidate in a fair trial</p>
<p>Acceptance Criteria: One candidate out of a couple with the same rating will be randomly chosen.</p>
<p>Definition of Done: The method is able to return a random candidate name from a list of candidates.</p>

Effort: Small
PBI Author(s): Bilal Osman, Liam O'Neil, Hyehwan Ryu, Soorya Sundravel

As an election official I want to be able to set the date of the election So that I can store information about when the election was conducted for future reference
Acceptance Criteria: The GUI asks for the date of an election
Definition of Done: GUI asks for the date of an election
Effort: Low
PBI Author(s): Hyehwan Ryu, Soorya Sundravel

As an election official I want to be able to see PO election results in a window So that I can see how election is simulated and calculated
Acceptance Criteria: The GUI shows election results and calculations on the screen.
Definition of Done: The class is able to contain all election information done through algorithms of PO and display it on the screen.
Effort: Medium
PBI Author(s): Bilal Osman

As an election official I want to be able to see CPL election results in a window So that I can see how election is simulated and calculated
Acceptance Criteria: The GUI shows election results and calculations/allocations of ballots on the screen.

Definition of Done: The class is able to contain all election information done through algorithms of CPL and display it on the screen.
Effort: Medium
PBI Author(s): Bilal Osman

As an election official I want a GUI window So that I can select ballot files for processing from a directory
Acceptance Criteria: The screen will allow the user to click on files from computer and/or type in filenames
Definition of Done: The GUI is able to input file names from local directories and from text input
Effort: Medium
PBI Author(s): Bilal Osman, Soorya Sundravel

As an election official I want a GUI window So that I can be able to start the election process
Acceptance Criteria: There is a GUI that the user can see and click on to start election simulation.
Definition of Done: The GUI is displayed on the screen with the necessary prompts and the user is able to run the main function in the FileParser class..
Effort: Large

PBI Author(s): Bilal Osman

As an election official
I want to store the election result in an audit file
So that I have proper documentation of election information

Acceptance Criteria: Write correct results of an election for PO to an audit file and return the correct audit file

Definition of Done: The election information gathered from the PO election simulation will be written onto the audit file which has been already created.

Effort: Small

PBI Author(s): Bilal Osman, Hyehwan Ryu, Soorya Sundravel