

- As an election official using the BallotPro application, I want the program to have no bugs or errors.

**Acceptance Criteria:** The program allows users to send a file for the election type CPL or OPL to run with no errors

**Definition of Done:** The program is properly documented and tested.

**Effort:** Low

**PBI Authors:** Team 11

- Task 1: Add GUI - not needed?
- Task 2: Add system test with over 1000 ballots - Wendell - Done
- Task 3: Fix Parties and winners are not correctly printed out.
- Task 4: Add unit testing for Election - Arzab - complete
- Task 5: Fix Doxygen - Arzab - Complete.
- Task 6: Add system testing for Election - Sam - complete

- As an election official using the BallotPro application, I want the program to allow me to bring in multiple files for the election type CPL instead of a single file so that I can bring in ballots from multiple locations.

**Acceptance Criteria:** The files should exist within the same directory. Program allows users to type in multiple files for the election type CPL and for CPL to run with no errors.

**Definition of Done:** The program properly allocates seats and displays the correct output of seats allocated for a candidates/parties object. Program gives the user failure or success message depending on if the files are located in the directory or not.

**Effort:** Medium

**PBI Authors:** Team 11

- Task 1: Refactor CPL code - Wendell - Done
- Task 2: Create CPL multiple file input code - Andy - Done
- Task 3: writing CPL unit tests - Arzab - complete
- Task 4: running CPL unit tests - Arzab - complete
- Task 5: creating CPL test logs - Arzab - complete
- Task 6: allow users to type in multiple CPL filenames, give error message if filename is not present in directory - Andy - Done
- Task 7: CPL code documentation - Wendell - Done

- As an election official using the BallotPro application, I want the program to allow me to bring in multiple files for the election type OPL instead of a single file so that I can bring in ballots from multiple locations.

**Acceptance Criteria:** The files should exist within the same directory. Program allows users to type in multiple files for the election type OPL and for OPL to run with no errors.

**Definition of Done:** The program properly allocates seats and displays the correct output of seats allocated for a candidates/parties object. Program gives the user a failure or success message depending on if the files are located in the directory or not.

**Effort:** Small

**PBI Authors:** Team 11

- Task 1: Refactor OPL code - wendell - done
- Task 2: Create OPL multiple file input code - wendell - done
- Task 3: writing OPL unit tests - Sam - complete
- Task 4: running OPL unit tests - Sam - complete
- Task 5: creating OPL test logs - Arzab - complete
- Task 6: allow users to type in multiple OPL filenames, give error message if filename is not present in directory - Andy - Done
- Task 7: OPL code documentation - wendell - done

- As an election official using the BallotPro application, I want the program to handle taking in and parsing csv files of election type MPO so that the program can take in data for a new election type.

**Acceptance Criteria:** Program allows the user to type in MPO file and for the program to parse through the file and store the data.

**Definition of Done:** The program properly reads in an MPO file and allocates the information into necessary objects or data structures. Program gives a failure or success message if the file is located in the directory.

**Effort:** Medium

**PBI Authors:** Team 11

- Task 1: Parse through initial file - Andy - Done
- Task 2: Store data - wendell - done
- Task 3: Writing MPO unit tests - Arzab - complete
- Task 4: Running MPO unit tests - Arzab - complete

- Task 5: Creating MPO test logs - Arzab - complete
  - Task 6: Prompt the user to type in a filename, throw error if the file does not exist in the directory - Andy - Done
- As an election official using the BallotPro application, I want the program to allow me to bring in multiple files for the election type MPO instead of a single file so that I can bring in ballots from multiple locations.

**Acceptance Criteria:** The program allows for the user to input different files for the same election and for the program to parse the information properly.

**Definition of Done:** The program properly displays the correct output of ballots allocated for candidates/parties.

**Effort:** Medium.

**PBI Authors:** Team 11

- Task 1: Write code that allows the user to input another file when in the process of getting ballots. - wendell - done
  - Task 2: Prompt the user to type in a filename, and throw an error if the files do not exist in the directory - Andy - Done
  - Task 3: Prompt the user to input files until they have no more. - Andy - Done
  - Task 4: Creating MPO test logs - Arzab - complete
  - Task 5: Writing MPO unit tests - Arzab - complete
  - Task 6: Running MPO unit tests - Arzab - complete
- As an election official using the BallotPro application, I want the program to be able to run MPO elections so that the seats will be properly allocated.

**Acceptance Criteria:** MPO csv files must exist within the directory, program must effectively parse through the csv files so that the proper data can be stored, program must properly allocate seats to the candidates/parties.

**Definition of Done:** The program properly allocates seats and displays the correct output of seats allocated for a candidates/parties object. System must inform users if the correct file names were typed in and allows for redo without breaking anything.

**Effort:** Medium

**PBI Authors:** Team 11

- Task 1: writing MPO election system tests - Arzab - complete
  - Task 2: running MPO election system tests - Arzab - complete
  - Task 3: creating MPO election test logs - Arzab - complete
  - Task 4: create tie breaker - Andy - Done
  - Task 5: create allocation seats algorithm. - wendell - done
  - Task 6: outputs the information in the terminal for when the allocation is done. - wendell - done.
- As an election official using the BallotPro application, I want the program to handle taking in and parsing csv files of election type MV so that the program can take in data for a new election type.

**Acceptance Criteria:** Program allows the user to type in MV file name and for the program to parse through the file properly.

**Definition of Done:** The program properly reads in an MV file and allocates the information into necessary objects or data structures. Program gives a failure or success message if the file is located in the directory.

**Effort:** Medium

**PBI Authors:** Team 11

- Task 1: Parse through the initial file - Andy - grab
  - Task 2: Store data - wendell - done
  - Task 3: Writing MV unit tests - Sam - complete
  - Task 4: Running MV unit tests - Sam - complete
  - Task 5: Creating MV test logs - Sam - complete
  - Task 6: Prompt the user to type in a filename, throw error if the file does not exist in the directory
- As an election official using the BallotPro application, I want the program to allow me to bring in multiple files for the election type MV instead of a single file so that I can bring in ballots from multiple locations.
- Acceptance Criteria:** Program allows users to type in multiple files for the election type MV. The program effectively parses through the multiple files respectively and is able to use the data within these files via storage and extraction.

**Definition of Done:** The program properly allocates seats and displays the correct output of ballots allocated for a candidates/parties object using MV files.

**Effort:** Small

**PBI Authors:** Team 11

- Task 1: Write code that allows the user to input another file when in the process of getting ballots. - wendell - done
  - Task 2: Prompt the user to type in a filename, and throw an error if the files do not exist in the directory
  - Task 3: Prompt the user to input files until they have no more.
  - Task 4: Creating MV test logs - Sam - complete
  - Task 5: Writing MV unit tests - Sam - complete
  - Task 6: Running MV unit tests - Sam - complete
- As an election official using the BallotPro application, I want the program to be able to run MP elections so that the seats will be properly allocated.

**Acceptance Criteria:** MP csv files must exist within the directory, system must inform users if the correct file names were typed in, program must properly allocate seats to the candidates/parties.

**Definition of Done:** The program properly allocates seats and displays the correct output of seats allocated for a candidates/parties object.

**Effort:** Large

**PBI Authors:** Team 11

- As an election official using the BallotPro application, I want the program to allow me as the election official to see the MPO election results on the screen

**Acceptance Criteria:** Displays stats at the end of the election that clearly show who won and who lost. It should also output the percentage of votes each candidate received so that constituents know how well their candidate did in the election.

**Definition of Done:** The program properly allocates seats and displays the correct output of seats allocated for a candidates/parties object.

**Effort:**

**PBI Authors:** Team 11

- As an election official using the BallotPro application, I want the program to display the stats for MV elections so that election statistics such as seats allocated are observable.

**Acceptance Criteria:** Displays stats at the end of the election that clearly show who won and who lost. It should also output the number of votes received by all voters.

**Definition of Done:** The program displays the correct output of seats allocated for an MV election.

**Effort:** Medium

**PBI Authors:** Team 11