Sprint Backlog

COMMITTED BACKLOG ITEMS

#1 Algorithms Fully Implemented
As a User
I want all algorithms that determine the results of an election (IRV, OPLV) work as described in the SRS document and SDD.
so that I can utilize the software confidently.

Acceptance Criteria:
- Tests are Written for all Algorithm paths
- Algorithm produces results for all algorithm expected path results including ties

Definition of Done:
- All IO Exception Handling is implemented
- Passes regression testing
- Meets all acceptance criteria
- In-line documentation and Javadocs have been updated.

Size: Small

Status: To-do

#2 Remove and Store Invalidated Ballots
As a user of the voting system,
I want IRV to only use valid ballots (ballots with at least half of the candidates ranked) and to store invalidated ballots into a separate audit file
so that the election is fair and only validated ballots are used

Acceptance Criteria:
- Audit file of invalidated ballot is produced
- Calculate election with validated ballots
- Invalidated ballots are only in the IRV election

Definition of Done:
- Passes Regression Testing
- Meeting all Acceptance Criteria
- In-line documentation and Javadocs have been updated.

Size: Medium

Status: To-do

#3 Election Table
As an official (of an IRV Election)
I would like to see a table showing each round of the IRV
so that I can see the number of votes that the candidate added/subtracted for each round

Acceptance Criteria:
- Calculate votes added for each candidate in each round
- Calculate votes subtracted for each candidate in each round
- Create GUI/Display of table

Definition of Done:
- Able to show feature in a demo
- Pass all tests (regression, acceptance, unit, etc)
- Approved by team
- Meets all Acceptance Criteria
- In-line documentation and Javadocs have been updated.

Size: Large

Status: To-do

 # 4 Command Line Argument Filename
As a user
I want to provide the filename as an argument in the commandline
so that I do not have to be prompted and to expedite the process of running the election

Acceptance Criteria:
- Take in the command line argument
- Save the argument as the file name
- No longer prompt the user, either in the command line or the GUI, for the file name

Definition of Done:
- Feature passes acceptance criteria
- Feature can be showed in a demo
- Approved by the team
- Passes all required tests
- In-line documentation and Javadocs have been updated.

Size: Small

Status: To-do

NOT STARTED

- Remove I/O from OPLV Unit Tests
- Remove I/O from IRV Unit Tests
- Update Test Logs for OPLV with file I/O Removed
- Handle File I/O exceptions
- Documentation of Exception Handling
- Update Test Logs for IRV with file I/O Removed

- Integrate removal of ballots to pass name of removed ballots file to GUI and Terminal
- Fix all automated testing that now has invalid ballots OR pass in how many votes on a ballot are required and test this
- Documentation
- Test Logs
- Automated Testing for invalid ballots

- Manually Test GUI Component
- Documentation
- Test Logs
- Meghann: Manually test printing votes added/subtracted for candidates in each round
- Meghann: Implement Printing Vote Data in GUI component
- Design unit tests election table data and integration
- Automated Testing

- Test file name as command line argument
- Test Logs
- Automated Testing

IN PROGRESSS

- CHRISTINE Handle ParseException By Throwing New Invalid File Exception

- CHRISTINE Code function to check if a ballot is valid
- CHRISTINE Test function which determines if a ballot should be removed
- CHRISTINE Code logic to remove all invalid ballots from the list of ballots that will be used to calculate the election
- CHRISTINE Test that the file with removed ballot has all removed ballots

- Meghann: Initial revision of Table (candidate names and round numbers)

COMPLETED

- JAKE Handle all other exceptions caused by Scanner in votingSystemFromFile
- JAKE Manual Testing of invalid files
- JAKE Delete Audit Files Generated By All Tests
- JAKE Test Logs of Exception Handling

- JAKE Design / Implement GUI Interface

- WATERFALL Read in filename command line argument
- WATERFALL Documentation

#5 Filename Prompt
As a user
I want to only be prompted for the filename on the command line
so I can dictate the election file

Acceptance Criteria:
- OPLV & IRV is properly calculated
- Audit file can recreate the election
- election is fair
- Ensure it is thoroughly Tested - Forms of Regression Testing
- Documentation

Definition of Done:
- Functionality is able to be demo-ed
- All tests have been written and passed
- A log of potential conflicts with components in the system
- In-line documentation and Javadocs have been updated.

Size: Small

Status: Done

#6 GUI Filename prompt
As a electoral official
I want a GUI to use to prompt me for the file name instead of a text prompt
so I do not have to use a terminal

Acceptance Criteria:
- Ensure it is throughly tested
- Allow user to look for file on their local device
- GUI appears when program is run

Definition of Done:
- Passes all regression test
- Approved by team
- In-line documentation and javadocs have been updated.
- Meets all Acceptance Criteria

Size: Large

Status: Done

#7 Handle Upwards of 100,000 Ballots
As a user
I want the program to be able to handle upwards of 100,000 ballots
so that I can run a large election or test the efficiency of the program

Acceptance Criteria:
- The program can run with an election file that contains 100,000 ballots
- The program will output the correct results
- The program still meets the efficiency requirements while running this large number of ballots
- Program will still operate and not break because of this

Definition of Done:
- All tests are passed
- Feature can be showed in a demo
- Acceptance criteria are all met
- Accepted by the team
- In-line documentation and Javadocs have been updated.

Size: Medium

Status: Done

#8 Print Summary Report
As an election official
I want the audit report and a short report containing date, type of election, candidates, the number of seats, and the winner(s) of the election
so that I can have a printable version to give to the election certification officials

Acceptance Criteria:
- Printable report
- Only contains date, type of election, candidates, the number of seats, and winner(s) of election
- Program produces both audit report and short report

Definition of Done:
- Passes all regression test
- Approved by team
- Able to show feature in demo
- Passes Acceptance Criteria

Size: Medium

Status: To-do

WATERFALL Implement GUI

WATERFALL Documentation

WATERFALL Testing

WATERFALL Test Logs

WATERFALL Implement Error Popups for Invalid File Name

WATERFALL Implement GUI

WATERFALL Implement Search Files on Machine

WATERFALL Implement Flag for NO GUI

WATERFALL Documentation for invalid file name popup

WATERFALL Create File with 100,000 ballots

WATERFALL Write Efficiency Test for 100,000 Votes

WATERFALL Documentation

WATERFALL Test Logs

JAKE Documentation for GUI

CASSANDRA Manually Test print summary

CASSANDRA Documentation for stringbuilder of print summary

CASSANDRA Test Logs for GUI Component

JAKE Design / Implement GUI Interface

CASSANDRA Code stringbuilder to collect quick print summary

#9 Add Votes Dynamically To Program Using GUI
As an election official using the GUI,
I want a way to add votes dynamically to the program
so that I can send the information directly to the system without the use of a file.

Acceptance Criteria:
- Run an election without a file
- A user can input details about the election that would normally be retrieved from the file (e.g. number of candidates).
- Ballots are dynamically added to the election
- Program will account for these and output the correct results
- Tests are written in JUNIT for all methods and classes created during the implementation of this feature

Definition of Done:
- Feature passes all tests
- Feature can be showed in a demo
- Accepted by the team
- Well documented in javadocs and inline
- Meets Acceptance Criteria

Size: Medium

Status: To-do

#10 Exception in Main Does Not Exit GUI
As a user
I want the GUI to exit with an alert when there is an exception in main
so that I know the program experienced a failure

Acceptance Criteria:
- The GUI exits when there is an exception in main
- The GUI continues to exit for other exceptions thrown
- The system will also flash an alert containing a message that the program failed
- This passes all manual and automated JUNIT tests

Definition of Done:
- The feature can be demo-ed in a presentation
- Accepted by the team
- Meets Acceptance Criteria
- Passes all tests
- Is well documented in line and in javaDocs

Size: Medium

Status: To-do

Implement GUI Functions for adding votes

Manually test dynamically input votes

Documentation

Automated Testing

Test Logs

JAKE Design GUI Interface for adding votes

JAKE Design / Implement GUI menu bar

Test GUI is gracefully exited when exception in Main

Catch all exceptions in Main and gracefully exit GUI

Design GUI alert for fatal exception

Documentation

Test Logs

Automated Testing