

Product Backlog

1

As the product owner,  
I want both plurality and STV to  
work properly,  
So that election results can be  
calculated.

Acceptance Criteria:

- Plurality works properly
- STV works properly
- Passes all unit tests
- Passes all possible cases  
specified by the csv files

Effort: Small

2

As the developer of the voting  
system,  
I want to be able to determine  
shuffle option,  
So that I can use for testing and  
make sure the election is fair.

Acceptance Criteria:

- Check if command line  
contains a third argument for  
shuffle option
- The default shuffle option is  
turned on
- Be able to let the developers  
to pass in on/off after the file  
name to indicate the shuffle  
option
- Passes all unit tests
- Passes all possible cases  
specified by the csv files

Effort: Small

3

As the user of the voting system,  
I want to input a CSV file,  
So that nothing else is prompted.

Acceptance Criteria:

- Be able to prompt user to  
input file name
- Be able to parse the file
- # ballots is less than 10000
- Each line represents one type  
of info
- PPasses all unit tests
- Passes all possible cases  
specified by the csv files

Effort: Small

4

As the user of the voting system,  
I want to run the voting system by  
parsing in a command line with  
the file name,  
So that the system can be run with  
just a command line argument.

Acceptance Criteria:

- Be able to handle command  
line argument
- Be able to parse the file
- Each line represents one type  
of info
- Passes all unit tests
- Passes all possible cases  
specified by the csv files

Effort: Small

5

As the election official,  
I want to make sure to only count  
for ballots that have at least half of  
the candidates ranked,  
So that ballots that do not meet  
this standard are determined to  
be invalidated when the election is  
run.

Acceptance Criteria:

- Be able to catch invalidated  
ballots during the process of  
running the voting system
- Be able to calculate the ratio  
between the rankings and the  
number of candidate for each  
ballot during each vote  
distribution
- Passes all unit tests
- Passes all possible cases  
specified by the csv files

Effort: Medium

6

As the election official,  
I want to have a short report in  
addition to an audit report  
So that the short report can be  
printed and given to the election  
certification officials.

Acceptance Criteria:

- Include date, type of election,  
the candidates, # seats and  
the winner of the election
- No losers list is included in the  
short report
- Passes all unit tests
- Passes all possible cases  
specified by the csv files

Effort: Small

Not Started

Modify the  
parsing method

Code the  
inputting shuffle  
option part

Update  
documentation  
for the parsing  
method

Write unit tests  
for determine  
shuffle option and  
shuffling ballots

Case testing

Modify codes for  
prompting the  
user for the file  
name

Codes to parse  
the file and find  
required  
information  
properly

Create a sample  
csv file for testing

Write unit tests  
for parsing file

Cases testing

Write unit tests  
for reading file  
name and open  
file

Coding to prompt  
user the file name

Update  
documentation

Cases testing

Update  
documentation

Cases testing

Code to identify  
the exact number  
of valid votes for a  
ballot.

code to identify  
invalidate ballots

Cases testing

Update  
documentation

Codes to generate  
the short report  
with required  
information

Unit tests for  
generating the  
short report

design the format  
of the short  
report

Sprint Backlog

In Progress

Completed

Write unit tests  
for plurality

Write unit tests  
for STV

Create several csv  
files for different  
test cases

Code the plurality  
algorithm

Code the STV  
algorithm

Create javadoc