

Product Backlog

Sprint Backlog

In Progress

Completed

Not Started

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

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 cutoff 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
- Passes 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 marked.
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

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

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

Code 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

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

code to identify
invalidated ballots

Update
documentation

Cases testing

Cases testing

Update
documentation

Codes to generate
the short report
with required
information

design the format
of the short
report

Unit tests for
generating the
short report