

Sprint 1 (04.08 - 04.14)

No.	Category	Committed Backlog Items	Tasks	Status		
1	Title	User Input in CSV file	Tasks	Not Started	In Progress	Finished
	Description	As the user, I want a CSV file to store all input information about candidates and ballots, so that I can run the election without previous knowledge of the elections other than the file name.	Determine the order/format of input information	X		
	Acceptance Criteria	<ul style="list-style-type: none"> All input can be loaded. The system can run without error. The CSV file can store all information about the candidates and the ballots 	Modify file reading method to parse input information	X		
			Test for file reading method	X		
			Store parsed input information in database struct	X		
			Test for write to database functionality	X		
	Effort	Medium				
2	Title	Ballot Validation	Tasks	Not Started	In Progress	Finished
	Description	As an election official, I want a ballot to be considered as valid if and only if it has at least half of the candidates ranked when using Droop Quota so that I can fulfill the requirement by my higher ups.	Modify file reading method to check ballot validity as reading the file	X		
	Acceptance Criteria	<ul style="list-style-type: none"> Valid ballots should contribute to the election. Invalid ballots should be filtered out and excluded from the election data. A ballot should either be valid or invalid, not other state. 	Test for file reading method	X		
			Store valid ballots to database struct	X		
			Test for overall ballot validation functionality	X		
	Effort	Medium				
3	Title	CSV File Input Mode	Tasks	Not Started	In Progress	Finished
	Description	As a user, I want to be able to choose to run the input file by either including it as an argument, or be prompted to enter an input filename, so that I can have a more flexible way to input the CSV file.	Modify program main function to allow 0 or 1 input parameters	X		
	Acceptance Criteria	<ul style="list-style-type: none"> The system can run without error. The user can include the input file name as an argument. If the input file name is not included as an argument, the system will prompt the user to enter the source of the input file. 	Test program main function with 0 parameter	X		
			Test program main function with 1 parameter	X		
			Test for the main function	X		
	Effort	Small				
4	Title	Visualization of Ballot Process	Tasks	Not Started	In Progress	Finished
	Description	As a product owner, I want the progress of the election to be visualized so that I can see and monitor the election progress as it is running.	Implement the visualization functionality (Terminal Based Progress Bar) of Plurality	X		
	Acceptance Criteria	<ul style="list-style-type: none"> A running total for each candidate. A state of winning and losing list If droop is chosen, a update on each pass should be shown If Plurality is chosen, tallies for each candidate should be updated 	Test for Plurality	X		
			Implement the visualization functionality (Terminal Based Progress Bar) of Droop Quota	X		
			Test for Droop Quota	X		
	Effort	Large				

Sprint 2 (04.15 - 04.21)

No.	Category	Committed Backlog Items	Tasks	Status		
1	Title	Accept ballot from users	Tasks	Not Started	In Progress	Finished
	Description	As a election officer, I want the system receive ballot directly from users input, so I don't need to recall the system if more ballots are added in election.	Modify program main function to keep running until finish accepting all user inputs	X		
	Acceptance Criteria	<ul style="list-style-type: none"> The system can run with error. User should have access for the election to vote The system process keep running to accept users' inputs until the end of voting process. 	Test system with different user inputs	X		
			Test inputing ballot from different users at s	X		
			Test in debug mode.	X		
2	Title	Get summary	Tasks	Not Started	In Progress	Finished
	Description	As a election official, I want to get a file that has the summary and certification of the election process, so I can get all important information as the time I need.	Create a other file with needed information during the algorithm process.	X		
	Acceptance Criteria	<ul style="list-style-type: none"> The system can run without error. The system can automatically generate output file during the process. The output file should be valid. 	Implement file creating functionality.	X		
			Test with different input files.	X		
			Test get Summary method.	X		
3	Title	Handle Large Data set	Tasks	Not Started	In Progress	Finished
	Description	As a user, I want the system allow to run a large input with good performant time, so I can use the system in a big election.	Check and modify data structure and algoritms to make sure the system have a reasonable perform time with large input	X		
	Acceptance Criteria	<ul style="list-style-type: none"> The system can be executed without error. User input should be valid The system structure can store massive amount of data. 	Test system with regular size of input	X		
			Test system with large size of input	X		
			Test system performan time with large input	X		
4	Title	Algorithm Implementation	Tasks	Not Started	In Progress	Finished
	Description	As a product owner, I want both Droop Quota and Plurality algorithm to be fully implemented, so that I can run elections using these 2 algorithms	Make shuffle an default option	X		
	Acceptance Criteria	<ul style="list-style-type: none"> Each algorithm should be fully implemented. Each algorithm should generate stable and correct election results. Each algorithm should be able to be tested. 	Test for shuffle option	X		
			Fix bug in Droop (Not distribute votes correctly)	X		
			Test for Droop algorithm	X		