Sprint 1 (04.08 - 04.14)

No.	Category	Commited 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	• 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	• 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	• 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	• 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	Commited 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	• 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 same time	X		
			Test in debug mode.	X		
	Effort	Small				
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	• The system can run without error. • The system can automatically generate output file during the process. • The output file should be valid.	Inplement file creating functionality.			X
			Test with different input files.			X
			Test get Summary method.			X
	Effort	Medium				
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	• 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	
	Effort	Large				
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	• 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		
	Effort	Large				