Sprint Backlog 4/25/2022

PBI ID	User Story	Owner	Tasks	Est Time (hours)	Status	Who's working on it	Acceptance Criteria	Definition of Done	Due Date
#1	As an election official, I want to be able to determine a number of winners via IRV so that I don't have to calculate the winners myself	Election Official	Fix file parsing to allow multiple winners/ensure that file parsing works properly	0.5	Done		The user can submit a file for input		4/20/2022
			Fix calcResults() function to allow multiple winners	0.5	Done		command can be run to calculate correct IRV election results	1) All previous regression tests pass	4/20/2022
			Ensure that correct winners can be retrieved by user	0.5	Done		receives correct results of the election	2) Regression tests for new functionality run automatically every build	4/20/2022
			Unit testing	2	Started	Ann, Sean	all tests pass and system is able to test runtime of 100000 ballots	3) Code written in pairs/ viewed by other members 4) Duplicate code is removed through refactoring 5) Messy code cleaned up through refactoring	4/20/2022
			bonus: split calcResults() into readInput() and calcResults() (low priority)	0.5	Done		Functionality of calcResults is maintained, but all functionality that involves reading from files is moved to readInput()	6) manual, exploratory testing has been conducted 7) Checkout and build fully reproducible (1-2 commands)	4/20/2022
#2	As an election official, I want to determine a number of winners via OPL so that I don't have to calculate the winners myself	Election Official	Ensure that file parsing works properly	0.5	Done		The user can submit a file for input		4/20/2022
			Fix calcResults() function to calculate the winners correctly	1.5	Done		command can be run to calculate correct OPL election results	1) All previous regression tests pass	4/20/2022
			Ensure that correct winners can be retrieved by user	0.5	Done		receives correct results of the election	2) Regression tests for new functionality run automatically every build	4/20/2022
			Unit Testing	3	Started	Ann, Sean	all tests pass and system is able to test runtime of 100000 ballots	3) Code written in pairs/ viewed by other members 4) Duplicate code is removed through refactoring 5) Messy code cleaned up through refactoring	4/20/2022
			bonus: split calcResults() into readInput() and calcResults() (low priority)	0.5	Done		Functionality of calcResults is maintained, but all functionality that involves reading from files is moved to readInput()	6) manual, exploratory testing has been conducted 7) Checkout and build fully reproducible (1-2 commands)	4/20/2022
#7	As an election official, I want to be able to bring in multiple files instead of a single file	Election Official	Change input loop so that "filename" always adds the given filename to a list of files, rather than overwriting previous filenames	0.25	Done	Shey, Jasper	"filename" command does not cause previous input filesnames to be overwritten, and instead adds the supplied filename to a list of filenames		4/22/2022
			give the filehandler a list of filenames rather than just one filename	0.25	Done	Shey, Jasper	FileHandler no longer keeps track of a single filename. Instead, FileHandler maintains a list of filenames.		4/22/2022
			replace FileHandler.setInputFile() with something like FileHandler.addInputFile(). this new method should behave similarly to setInputFile but should add valid files to the list of filenames rather than just overwriting the previous filename	0.25	Done	Shey, Jasper	FileHandler.setInputFile() no longer exists, and FileHandler.addInputFile() is created with full functionality. New function checks the supplied filename for if it exists. If it exists, then it is added to the list of filenames. Otherwise it is ignored.		4/22/2022
			possibly change from creating a FileHandler when the first file is passed in, to creating one when the program starts?	0.25	Done	Shey, Jasper	System creates a FileHandler object when the program starts up, this object is closed when the program is closed via the "exit" command. The System no longer creates a FileHandler object when the first valid filename is passed in.	1) All previous regression tests pass 2) Regression tests for new functionality run automatically every build 3) Code written in pairs/ viewed by other members	4/22/2022
			create a getter for FileHandler.filenames.size (probably useful for adding multiple file support to electionOPL/electionIRV)	0.25	Done	Shey, Jasper	FileHandler has a getter function which returns the FileHandler's list of files.	4) Duplicate code is removed through refactoring 5) Messy code cleaned up through refactoring	4/22/2022
			update electionOPL to support reading input from multiple files	0.5	Done	Shey, Jasper	an OPL election can be ran which draws its inputs from more than one input file	6) manual, exploratory testing has been conducted 7) Checkout and build fully reproducible (1-2 commands)	4/22/2022
			update electionIRV to support reading input from multiple files	0.5	Done	Shey, Jasper	an IRV election can be ran which draws its inputs from more than one input file		4/22/2022
			possibly create function which makes it possible to remove files from the list of input files (low priority)	0.5	Done	Shey, Jasper	the user can remove a filename from the list of filenames via a command.		4/22/2022

PBI	User Story	Task	Status	Hours	Assignees	Acceptance Criteria	Definition of Done	Date
#9	As an election official, I want to be able to automatically filter out the ballots which have less than half the candidates ranked in an IRV election	Unit testing	Started	2	Ann, Sean	All unit tests for each of the tasks for this PBI pass, along with all previous unit tests.		4/22/2022
		change the code which reads the ballots in so that it checks each ballot for if it is valid. Invalid ballots will be disregarded/added to audit file	Started	0.5	Shey, Jasper	An IRV election can be fed invalid ballots via input file(s) and the election will automatically ignore and mark the invalid ballots in the relevant audit file	1) All previous regression tests pass 2) Regression tests for new functionality run automatically every build 3) Code written in pairs/ viewed by other members 4) Duplicate code is removed through refactoring 5) Messy code cleaned up through refactoring 6) manual, exploratory testing has been conducted 7) Checkout and build fully reproducible (1-2 commands)	4/25/2022
		update FileHandler to support this new audit file (add a function)	Started	0.5	Shey, Jasper	Can log a string to the audit file via some FileHandler method. This method takes a string and logs that string to the audit file.		4/25/2022
		Unit testing	Started	1	Ann, Sean	all tests pass and system is able to test runtime of 100000 ballots		4/25/2022
#4	As an election official, I want to be able to bring in PO election ballots via a .csv file, so that I don't have to input the individual ballots manually	create ElectionPO class	Started	0.25	Shey, Jasper	ElectionPO class exists and extends the Election class		4/27/2022
		write ElectionPO.readInputs() which reads all supplied files for inputs.	Started	1.5	Shey, Jasper	ElectionPO.readInputs() exists and can read all candidates/votes in from all supplied input files.	1) All previous regression tests pass 2) Regression tests for new functionality run automatically every build 3) Code written in pairs/ viewed by other members 4) Duplicate code is removed through refactoring 5) Messy code cleaned up through refactoring 6) manual, exploratory testing has been conducted 7) Checkout and build fully reproducible (1-2 commands)	4/27/2022
		If the default Candidate class is not enough to complete this, then write a CandidatePO class	Started	0.5	Shey, Jasper	CandidatePO class exists and has all needed functionality which the Candidate class did not have.		4/27/2022
		unit testing	Started	2	Ann, Sean	all tests pass and system is able to test runtime of 100000 ballots		4/27/2022
#3	As an election official, i want to be able to determine a single winner via PO (the candidate who received the most ballots)	create ElectionPO.calcResults() which behaves similarly to ElectionIRV.calcResults() and ElectionOPL.calcResults()	Started	1.5	Shey, Jasper	command can be run to calculate correct PO election results		4/27/2022
		ensure that correct winners can be retrieved by user	Started	0.5	Shey, Jasper	receives correct results of the election	1) All previous regression tests pass 2) Regression tests for new functionality run automatically every build 3) Code written in pairs/ viewed by other members 4) Duplicate code is removed through refactoring 5) Messy code cleaned up through refactoring 6) manual, exploratory testing has been conducted 7) Checkout and build fully reproducible (1-2 commands)	4/27/2022
		create input command to request PO election	Started	0.5	Shey, Jasper	existing input command can read a PO election option		4/27/2022
		unit testing	Started	2	Shey, Jasper	all tests pass and system is able to test runtime of 100000 ballots		4/27/2022
		write a fair random coin flip (possibly use the one which was already written)	Started	0.5	Ann, Sean	Coin flip in case of tie is fair and randomized		4/27/2022