Project Name: Project 1: Voting System	Team 6		
Test Stage: Unit	Test Date: 11/13/2018		
Test Case ID#: IRV_Constructor_Test Test Description: Test to make sure the default constructor for the InstantRunoffBallot class works correctly	Name(s) of Testers: John Caspers		
Automated: yes	Indicate where are you storing the tests (what file) and the name of the method/functions being used.		
Results: Pass			
Preconditions for Test: Instances of InstantRunoffBallot can successfully be created			

Step # 1	Test Step Description	Test Data	_	Actual Result	Notes
2	Create IRVballot object ballot	Test IR ballot	New ArrayList<>() == ballot	New ArrayList<>() == ballot	
3					
4					

Returns pass signifying that a InstantRunoffBallot was created correctly

ing the tests (what file) and the ns being used.
_

Step	Test Step	Test	Expected	Actual	
#	Description	Data	Result	Result	Notes
1					
2	Create InstantRunoffBallot ballot				
3		createVoteList(), ballot.getVoteList()	Both are equal	Both are equal	
4					

Post condition(s) for Test: The test passes and createVoteList() equals ballot.getVoteList()

Test Stage: Unit
Test Case ID#: IRV_testEquals_
Test Description: Test Equals() method of
InstantRunoffBallot class

Indicate where are you storing the tests (what file) and the name of the method/functions being used.

Automated: yes

Results: Pass

Preconditions for Test: Instances of InstantRunoffBallot can successfully be created

Step # 1	Test Step Description	Test Data	Expected Result	Actual Result	Notes
2	Create InstantRunoffBallot ballot1				
3	Create InstantRunoffBallot ballot2				
4	Create InstantRunoffBallot ballot3				
1	assertEquals() assertEquals() assertNotEquals()	(ballot1, ballot1) (ballot1, ballot2) (ballot1, ballot3)	ballot1 == ballot1 ballot1 == ballot2 ballot1 != ballot3	ballot1 == ballot1 ballot1 == ballot2 ballot1 != ballot3	

Post condition(s) for Test: ballot1 is equal to ballot2. Ballot1 is not equal to ballot3

Test Stage: Unit Test Case ID#: OPL_Constructor_ Test Description: Test to make sure the OpenPartyListBallot class objects can successfully be created	Test Date: 11/13/18 Name(s) of Testers: David
Automated: yes	Indicate where are you storing the tests (what file) and the name of the method/functions being used.
Results: Pass	
Preconditions for Test: Instances of OpenParty can successful	lly be created

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Create OPL ballot object		Ballot.getvoteList() == newArrayList<>()	Ballot.getvoteList() == newArrayList<>()	
2	ereate of E banot object		new may bist o ()		

Post condition(s) for Test: assertEquals(createVoteList(candidateNum, party), ballot.getVoteList()) returns true

Test Stage: Unit	Test Date: 11/13/18
Test Case ID#: OPLballot_Ballot_ Test Description: Test to make sure the OpenPartyListBallot class objects can successfully be created and GetVoteList()	Name(s) of Testers: John
Automated: yes	Indicate where are you storing the tests (what file) and the name of the method/functions being used.
Results: Pass	
Preconditions for Test: Instances of OpenParty can successful	lly be created and GetVoteList() works

Step	Test Step	Test	Expected	Actual	
#	Description	Data	Result	Result	Notes
			Ballot.getvoteList() ==	Ballot.getvoteList() == newArrayList<>()	
1	Create OPL ballot object		newArrayList<>()		
2					

Post condition(s) for Test: assertEquals(createVoteList(candidateNum, party), ballot.getVoteList()) returns true

Test Stage: Unit	Test Date: 11/13/18
Test Case ID#: OPLballot_Equals_ Test Description: Test to make sure the OpenPartyListBallot class objects can successfully be created and Equals() works	Name(s) of Testers: John
Automated: yes	Indicate where are you storing the tests (what file) and the name of the method/functions being used.
Results: Pass	
Preconditions for Test: Instances of OpenParty can successful	ly be created and Equals() works

Step	Test Step	Test	Expected	Actual	
#	Description	Data	Result	Result	Notes
1	G ON LUL II			Ballot.getvoteList() == newArrayList<>()	
1	Create OPL ballot object		newArrayList<>()		
	Create InstantRunoffBallot				
2	ballot1				
	Create InstantRunoffBallot				
3	ballot2				
	Create InstantRunoffBallot				
4	ballot3				
	assertEquals()	(ballot1, ballot1)	ballot1 == ballot1	ballot1 == ballot1	
1 .	assertEquals()	(ballot1, ballot2)	ballot1 == ballot2	ballot1 == ballot2	
5	assertNotEquals()	(ballot1, ballot3)	ballot1 != ballot3	ballot1 != ballot3	

Post condition(s) for Test: assertEquals(createVoteList(candidateNum, party), ballot.getVoteList()) returns true

Test Stage: System	Test Date: 11/13/18
Test Case ID#: OPL_runElection _ Test Description: Test to make sure an OPL runElection() works for a given OPL csv file	Name(s) of Testers: John
Automated: no	Indicate where are you storing the tests (what file) and the name of the method/functions being used.
Results: Pass	
Preconditions for Test: Input testOPLInput.cvs file path	

Step #	Test Step Description	Test Data	_ _	Actual Result	Notes
2	Run Drivers.java				
	Give testOPLInput.csv file path				
3	as input				
4	Give audit file output path				
			Audit file created and winners	Audit file created and winners outputted to	
5	Check output file		outputted to screen	screen	

Post condition(s) for Test: Pike, Foster, Borg are win and audit file was successfully created for given output path

Test Stage: System Test Case ID#: IRV_runElection _ Test Description: Test to make sure an IRV runElection() works for a given IRV csv file	Test Date: 11/13/18 Name(s) of Testers: John
Automated: no	Indicate where are you storing the tests (what file) and the name of the method/functions being used.
Results: Pass	
Preconditions for Test: Input testOPLInput.cvs file path	

Step	Test Step	Test	Expected	Actual	
#	Description	Data	Result	Result	Notes
1					
2	Run Drivers.java				
	Give testIRVInput.csv file path				
3	as input				
4	Give audit file output path				
			Audit file created and winners	Audit file created and winners outputted to	
5	Check output file		outputted to screen	screen	

Post condition(s) for Test: Chou wins and audit file was successfully created for given output path

Test Stage: Unit _x_ System	Test Date: 11/13/2018
Test Case ID#: IRV_Vote_1	Name(s) of Testers: Daniel Rockcastle
Test Description: Tests default constructor for IRV.	
	Indicate where are you storing the tests (what file) and the name of the method/functions being used. Stored in the class InstantRunoffVoteTest.
Automated: yes_x_ no	The method is testDefaultConstructor.
Results: Passx_ Fail	
Preconditions for Test: Instance of InstantRunoffVote ca	n be created.

Step	Test Step	Test	Expected	Actual	
#	Description	Data	Result	Result	Notes
			Created vote has a default	Created vote has a default	
1	Run the test.	N/A	candidate and rank.	candidate and rank.	
2					
3					
4					

Project Name: Project 1: Voting System	Team#
Test Stage: Unit _x_ System	Test Date: 11/13/2018
Test Case ID#: IRV_Vote_2	Name(s) of Testers: Daniel Rockcastle
Test Description: Tests constructor for IRV.	

Automated: yes_x_ no	Indicate where are you storing the tests (what file) and the name of the method/functions being used. Stored in the class InstantRunoffVoteTest. The method is testConstructor.
Results: Passx_ Fail	
Preconditions for Test: Instance of InstantRunoffVote	e can be created.

			Expected	Actual	
Step	Test Step	Test	Result	Result	Notes
#	Description	Data			
			Created vote has passed	Created vote has passed in	
			in candidate and passed	candidate and passed in rank.	
1	Run the test.	N/A	in rank.		
2					
3					
4					

Project Name: Project 1: Voting System	Team#
Test Stage: Unit _x_ System	Test Date: 11/13/2018
Test Case ID#: IRV_Vote_3	Name(s) of Testers: Daniel Rockcastle
Test Description: Tests getCandidate for IRV.	
	Indicate where are you storing the tests (what file) and the
	name of the method/functions being used.
	Stored in the class InstantRunoffVoteTest.
Automated: yes_x_ no	The method is testGetCandidate.

Results: Passx Fail	
Preconditions for Test: Instance of InstantRunoffVote can be	created.

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Run the test.	N/A	Created vote can have candidate name and party pulled from it.	Created vote can have candidate name and party pulled from it.	
2					
3					
4					

Project Name: Project 1: Voting System	Team#
Test Stage: Unit _x_ System	Test Date: 11/13/2018
Test Case ID#: IRV_Vote_4	Name(s) of Testers: Daniel Rockcastle
Test Description: Tests getRank for IRV.	
	Indicate where are you storing the tests (what file) and the
	name of the method/functions being used.
	Stored in the class InstantRunoffVoteTest.
Automated: yes_x_ no	The method is testGetRank.
Results: Passx_ Fail	
Preconditions for Test: Instance of InstantRunoffVote	can be created.

			Expected	Actual	
Step	Test Step	Test	Result	Result	Notes
#	Description	Data			
			Created vote can have	Created vote can have rank	
1	Run the test.	N/A	rank pulled from it.	pulled from it.	
2					
3					
4					_

Project Name: Project 1: Voting System	Team#		
Test Stage: Unit _x_ System	Test Date: 11/13/2018		
Test Case ID#: IRV_Vote_5	Name(s) of Testers: Daniel Rockcastle		
Test Description: Tests Equals for IRV.			
	Indicate where are you storing the tests (what file) and the name of the method/functions being used.		
	Stored in the class InstantRunoffVoteTest.		
Automated: yes_x_ no	The method is testEquals.		
Results: Passx Fail			
Preconditions for Test: Instance of InstantRunoffVote can be created.			

			Expected	Actual	
Step	Test Step	Test	Result	Result	Notes
#	Description	Data			
			Two equally created	Two equally created votes are	
			votes are returned as	returned as equal.	
1	Run the test.	N/A	equal.		
2					

3			
4			

Unit test passes.

Project Name: Project 1: Voting System	Team#
Test Stage: Unit _x_ System	Test Date: 11/13/2018
Test Case ID#: OPL_Vote_1	Name(s) of Testers: Daniel Rockcastle
Test Description: Tests default constructor for OPL.	
	Indicate where are you storing the tests (what file) and the
	name of the method/functions being used.
	Stored in the class OpenPartyListVoteTest.
Automated: yes_x_ no	The method is testDefaultConstructor.
Results: Passx_ Fail	
Preconditions for Test: Instance of OpenPartyListVote can b	e created.

			Expected	Actual	
Step	Test Step	Test	Result	Result	Notes
#	Description	Data			
			Created vote has a	Created vote has a default	
1	Run the test.	N/A	default candidate.	candidate.	
2					
3					
4					

Post condition(s) for Test:

Project Name: Project 1: Voting System	Team#
Test Stage: Unit _x_ System	Test Date: 11/13/2018
Test Case ID#: OPL_Vote_2	Name(s) of Testers: Daniel Rockcastle
Test Description: Tests constructor for OPL.	
	Indicate where are you storing the tests (what file) and the
	name of the method/functions being used.
	Stored in the class OpenPartyListVoteTest.
Automated: yes_x_ no	The method is testConstructor.
Results: Passx Fail	
Preconditions for Test: Instance of OpenPartyListVote can I	be created.

			Expected	Actual	
Step	Test Step	Test	Result	Result	Notes
#	Description	Data			
			Created vote has a	Created vote has a candidate.	
1	D. a that tast	A1 / A	candidate. Party and	Party and name check out.	
1	Run the test.	N/A	name check out.		
2					
3					
4					

Project Name: Project 1: Voting System	Team#
Test Stage: Unit _x_ System	Test Date: 11/13/2018
Test Case ID#: OPL_Vote_3	Name(s) of Testers: Daniel Rockcastle
Test Description: Tests getCandidate for OPL.	

Automated: yes_x_ no	Indicate where are you storing the tests (what file) and the name of the method/functions being used. Stored in the class OpenPartyListVoteTest. The method is testGetCandidate.	
Results: Passx Fail		
Preconditions for Test: Instance of OpenPartyListVote can be created.		

			Expected	Actual	
Step	Test Step	Test	Result	Result	Notes
#	Description	Data			
			Created vote has a	Created vote has a candidate.	
			candidate. Party and	Party and name check out.	
1	Run the test.	N/A	name check out.		
2					
3					
4					

Project Name: Project 1: Voting System	Team#
Test Stage: Unit _x_ System	Test Date: 11/13/2018
Test Case ID#: OPL_Vote_4	Name(s) of Testers: Daniel Rockcastle
Test Description: Tests equals for OPL.	
	Indicate where are you storing the tests (what file) and the
	name of the method/functions being used.
	Stored in the class OpenPartyListVoteTest.
Automated: yes_x_ no	The method is testEquals.
Results: Passx Fail	

Preconditions for Test: Instance of OpenPartyListVote can be created.

			Expected	Actual	
Step	Test Step	Test	Result	Result	Notes
#	Description	Data			
			Two equally created	Two equally created OPL votes	
			OPL votes are checked	are checked to be equal.	
1	Run the test.	N/A	to be equal.		
2					
3					
4					

 $\label{eq:post_condition} \textbf{Post} \ \textbf{condition}(s) \ \textbf{for} \ \textbf{Test:}$

Test Stage: Unit _X_ System	Test Date: 11/11/2018
Test Case ID#: CandidateTest_1 Test Description: Tests the default constructor in Candidate.java	Name(s) of Testers: Daniel Rockcastle
Automated: yes_x_ no	Indicate where are you storing the tests (what file) and the name of the method/functions being used. testDefaultConstructor() function in CandidateTest.java in testing folder.
Results: Pass _x_ Fail	
Preconditions for Test:	
The code compiles.	

StepTest StepTestExpectedActual	
---------------------------------	--

#	Description	Data	Result	Result	Notes
	Checks the candidate		True	True	
	name, candidate party				
	name and number of				
1	votes initially (=0)	N/A			
2					
3					
4					
	1'4' (.) C T 4				
st	condition(s) for Test:				
	TDI 4 4				
	The test passes.				
T		G . 4		D 4 D 4 44/44/2010	
	t Stage: Unit _X_			Fest Date: 11/11/2018	Poolkoostlo
Tes Tes	t Stage: Unit _X_ t Case ID#: Candida t Description: Tests tl ndidate.java	teTest_3		Γest Date: 11/11/2018 Name(s) of Testers: Daniel R	Rockcastle
Tes Tes	t Case ID#: Candida t Description: Tests tl	teTest_3	nction in	Name(s) of Testers: Daniel R Indicate where are you storing name of the method/function	ng the tests (what file) and the s being used.
Tes Tes Car	t Case ID#: Candida t Description: Tests tl	teTest_3 he getName() fu	unction in	Name(s) of Testers: Daniel R	ng the tests (what file) and the
Tes Tes Car	t Case ID#: Candida t Description: Tests tl ndidate.java	teTest_3 he getName() fu	unction in	Name(s) of Testers: Daniel R Indicate where are you storing name of the method/function testGetName() function in C	ng the tests (what file) and the s being used.
Tes Tes Car Auto	t Case ID#: Candida t Description: Tests th didate.java omated: yes_x n	teTest_3 he getName() fu	unction in	Name(s) of Testers: Daniel R Indicate where are you storing name of the method/function testGetName() function in C	ng the tests (what file) and the s being used.

Step	Test Step	Test	Expected	Actual	
#	Description	Data	Result	Result	Notes
	Checks the candidate		True	True	
1	name	n/a			
2					
3					

4						
Post condition(s) for Te	est:					
The test passes.						
Test Stage: Unit _X	_ System		Test Dat	e: 11/11/2018		
Test Case ID#: Cand	ideteTest 4		Name (a) of Tagtong, David Dadrocetle			
Test Case 1D#. Cand Test Description: Tes	-	MVotes function in	Name(s) of Testers: Daniel Rockcastle			
Candidate.java	is the gentumber o	of votes function in				
			Indicate	where are you stori	ing the tests (what file) and the
				the method/function		
				3-5	unction in Ca	ndidateTest.java in
Automated: yes_x			testing fo	older.		
Results: Pass _x_	Fail					
Preconditions for Test	t:					
The code compiles.						
Step Test Step	Test	Expected		Actual		Notes
T Locowinstion	l loto	I I A CONTIN		III CONTIN		I NIOTOG

Step	Test Step	Test	Expected	Actual	
#	Description	Data	Result	Result	Notes
	Checks the number of		True	True	
1	votes	n/a			
2					
3					
4					

The test passes.

Test Date: 11/11/2018
Name(s) of Testers: Daniel Rockcastle
Indicate where are you storing the tests (what file) and the name of the method/functions being used. testAddVote() function in CandidateTest.java in testing folder.

Step	Test Step	Test	Expected	Actual	
# _	Description	Data	Result	Result	Notes
	Checks if the addVote		True	True	
	increments the number of				
1	votes by 1	n/a			
2					
3					
4					

The test passes.

Test Stage: Unit _X_ System __

Test Case ID#: CandidateTest_2

Test Description: Tests the parametrized constructor in

Candidate.java

Test Date: 11/11/2018

Name(s) of Testers: Daniel Rockcastle

Automated: yes_x Results: Pass_x_ I	no 'ail		Indicate where are you storing the tests (what file) and the name of the method/functions being used. testConstructor() function in CandidateTest.java in testing folder.		
Preconditions for Test: The code compiles.					
Step # Description Checks the candidate name, candidate party name and number of votes 2 3 4 Post condition(s) for Test The test passes.	Test Data	Expected Result True	Actual Result True	Notes	
Test Stage: Unit _✓_ System Test Case ID#: ReadInputTest_1 Test Description: Tests the parseInputLinesOPL() function			Test Date: 11/13/2018 Name(s) of Testers: Michael I Indicate where are you storing name of the method/functions testParseInputLinesOPL() in folder.	g the tests (what file) and the	

Resu	lts: Pass: Yes	Fail			_
Prec	onditions for Test	: The code compiles	S.		
Step #	Test Step Description	Test Data	Expected Result Two equally create OpenPartyListElec		Notes objects are
	Run the test	N/A	objects are created.	created.	
2					
3					
4					
Test	Stage: Unit _X Case ID#: Cand Description: Test	•	Na	est Date: 11/11/2018 nme(s) of Testers: Daniel Ro	ockcastle
			na te	me of the method/functions stGetParty() function in Car	
Auto	omated: yes_x	no	fo	der.	
Resu	lts: Pass _x_	Fail			
	onditions for Test code compiles.	:			
<u> </u>	m . G	l m	la .	Ta	
Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes

	Checks if getParty		True		True	
	function returns the					
1	correct party name	N/A				
2						
3						
4						
Post	condition(s) for Test:					
·	The test passes.					
Tes	t Stage: Unit _X_ t Case ID#: Candidate t Description: Tests the	eTest_6			e: 11/11/2018 of Testers: Daniel Rockcastle	
Auto	omated: yes_x no			name of t	where are you storing the tests (he method/functions being used ls() function in CandidateTest.j:	•
Resu	ılts: Pass _x_ Fail					
_						
	onditions for Test:					
The o	code compiles.					

Step	Test Step	Test	Expected	Actual	
#	Description	Data	Result	Result	Notes
	Checks if the equals		True	True	
1	function works properly	N/A			
2					
3					
4					

The test passes.

Test Stage: Unit _X_ System	Test Date: 11/13/2018
Test Case ID#: ReadInputTest_2 Test Description: Tests the parseInputLinesIRV() function.	Name(s) of Testers: Michael Birk
Automated: yes_x no	Indicate where are you storing the tests (what file) and the name of the method/functions being used. testParseInputLinesIRV() function in ReadInputTest.java testing folder.
Results: Pass _x_ Fail	
Preconditions for Test: The code compiles.	

Step	Test Step	Test	Expected	Actual	
#	Description	Data	Result	Result	Notes
			Two equally created	Two equally created	
			InstantRunOffElection	InstantRunOffElection	
1	Run the test.	N/A	objects are created	objects are created	
2					
3					
4					

Post condition(s) for Test:

The test passes.