Project Name: Project 1: Voting System Team# 18

Ballot Tests

testCurrentDistribution

Test Stage: Unit X System _
Test Case ID#: testBallot_1
Test Description: Checks to see if the ballot function getCurrentDistribution behaves as expected.

Test Date: 03/20/21
Name(s) of Testers: Roshina, Thomas, Linh

Automated: Yes X No _
Results: Pass X Fail _

The file is stored in project1/src/BallotTest.java
testCurrentDistribution()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the current distribution of the ballot is 1.	Ballot object	1	1	

Postconditions for Test: None

testIncrementCurrentDistribution

Test Stage: Unit X System _
Test Case ID#: testBallot_2
Test Description: Checks to see if the ballot function incrementCurrentDistribution behaves as expected.

Test Date: 03/20/21
Name(s) of Testers: Roshina, Thomas, Linh

Automated: Yes X No _
Results: Pass X Fail _

The file is stored in project1/src/BallotTest.java
testIncrementCurrentDistribution()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the current distribution of the ballot has increased by 1.	Ballot object	2	2	

Postconditions for Test: None

testIncrementCurrentDistributionTwice

Test Stage: Unit X System _
Test Case ID#: testBallot_3
Test Description: Checks to see if the ballot function incrementCurrentDistribution behaves as expected after two increments.

Automated: Yes X No _
Results: Pass X Fail _

Test Date: 03/27/21
Name(s) of Testers: Roshina, Thomas, Linh

The file is stored in project1/src/BallotTest.java
testIncrementCurrentDistributionTwice()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the current distribution of the ballot has increased by 2 after two increments.	Ballot object	3	3	

Postconditions for Test: None

testFindDistributionVote

Test Stage: Unit X System _
Test Case ID#: testBallot_4
Test Description: Checks to see if the ballot function findDistributionVote behaves as expected when there are no more candidates.

Automated: Yes X No _
Results: Pass X Fail _

Test Date: 03/27/21
Name(s) of Testers: Roshina, Thomas, Linh

The file is stored in project1/src/BallotTest.java
testFindDistributionVote()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check the initial current distribution of the ballot.	Ballot object	0	0	
2	Check that the current distribution is 1 when there is another candidate.	Ballot object	1	1	

Postconditions for Test: None

testFindDistributionVoteEnd

Test Stage: Unit X System _
Test Case ID#: testBallot_5
Test Description: Checks to see if the ballot function findDistributionVote behaves as expected when there are no more candidates.

Automated: Yes X No _
Results: Pass X Fail _

Test Date: 03/20/21
Name(s) of Testers: Roshina, Thomas, Linh

The file is stored in project1/src/BallotTest.java
testFindDistributionVoteEnd()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check the initial current distribution of the ballot.	Ballot object	0	0	
2	Check that the current distribution is -1 when there are no more candidates.	Ballot object	-1	-1	

Postconditions for Test: None

Candidate Tests

testCandidateConstructor1

Test Stage: Unit X System _	**Test Date:** 03/14/21
Test Case ID#: testCandidate_1	**Name(s) of Testers:** Roshina, Thomas, Linh
Test Description: Checks to see if the candidate constructors behave as expected.	
Automated: Yes X No _	The file is stored in project1/src/CandidateTest.java testCandidateConstructor1()
Results: Pass X Fail _	

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that setting the candidate list works for candidate 1.	cand1 in CandidaateTest.java	“Tester1”	“Tester1”	

Postconditions for Test: None

testCandidateConstructor2

Test Stage: Unit X System _
Test Case ID#: testCandidate_2
Test Description: Checks to see if the candidate constructors behave as expected.

Test Date: 03/14/21
Name(s) of Testers: Roshina, Thomas, Linh

Automated: Yes X No _
Results: Pass X Fail _

The file is stored in project1/src/CandidateTest.java
testCandidateConstructor2()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that setting the candidate list works for candidate 2.	cand2 in CandidateTest.java	“Tester2”	“Tester2”	
2	Check that the Candidate (string) returns the correct party name.	cand2 in CandidateTest.java	“Republic”	“Republic”	

Postconditions for Test: None

testCandidateConstructor3

Test Stage: Unit X System _	**Test Date:** 03/14/21
Test Case ID#: testCandidate_3	**Name(s) of Testers:** Roshina, Thomas, Linh
Test Description: Checks to see if the candidate constructors behave as expected.	
Automated: Yes X No _	**The file is stored in project1/src/CandidateTest.java**
Results: Pass X Fail _	**testCandidateConstructor3()**

Postconditions for Test: None

1	Check that setting the candidate list works for candidate 3.	cand3 in CandidaateTest.java	“Tester3”	“Tester3”	
2	Check that setting the party votes works.	cand3 in CandidateTest.java	“10”	“10”	

Postconditions for Test: None

testCandidateConstructor4

Test Stage: Unit X System _
Test Case ID#: testCandidate_4
Test Description: Checks to see if the candidate constructors behave as expected.

Test Date: 03/14/21
Name(s) of Testers: Roshina, Thomas, Linh

Automated: Yes X No _
Results: Pass X Fail _

The file is stored in project1/src/CandidateTest.java
testCandidateConstructor4()

Postconditions for Test: None

1	Check that setting the candidate list works for candidate 4.	cand4 in CandidaateTest.java	“Tester4”	“Tester4”	
2	Check that setting the party votes works.	cand4 in CandidateTest.java	“5”	“5”	
3	Check that setting the party votes works.	cand4 in CandidateTest.java	“1”	“1”	
4	Check that the Candidate (string) returns the correct party name.	cand4 in CandidateTest.java	“Liberal”	“Liberal”	

Postconditions for Test: None

testGetParty

Test Stage: Unit X System _
Test Case ID#: testCandidate_5
Test Description: Checks to see if the Party getter behaves as expected.

Test Date: 03/14/21
Name(s) of Testers: Roshina, Thomas, Linh

Automated: Yes X No _
Results: Pass X Fail _

The file is stored in project1/src/CandidateTest.java
testGetParty()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the Candidate (string) returns the correct party name.	candidate1 in CandidateTest.java	“Independent”	“Independent”	

Postconditions for Test: None

testGetVotes

Test Stage: Unit X System _	**Test Date:** 03/14/21
Test Case ID#: testCandidate_6	**Name(s) of Testers:** Roshina, Thomas, Linh
Test Description: Checks to see if the Votes getter behaves as expected.	
Automated: Yes X No _	The file is stored in project1/src/CandidateTest.java
Results: Pass X Fail _	testGetVotes()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that setting the party votes works.	candidate 1 in CandidateTest.java	10	10	
2	Check that setting the party votes works.	candidate 1 in CandidateTest.java	1	1	
3	Check that setting the party votes works.	candidate 1 in CandidateTest.java	4	4	

Postconditions for Test: None

testGetBallots

Test Stage: Unit X System _	**Test Date:** 03/14/21
Test Case ID#: testCandidate_7	**Name(s) of Testers:** Roshina, Thomas, Linh
Test Description: Checks to see if the Votes getter behaves as expected.	
Automated: Yes X No _	The file is stored in project1/src/CandidateTest.java
Results: Pass X Fail _	testGetBallots()

Postconditions for Test: None

1	Check that getting the ballot distribution works.	cand4 in CandidateTest.java	1	1	

Postconditions for Test: None

Election Tests

testTotalVotes

Test Stage: Unit X System _	**Test Date:** 03/14/21
Test Case ID#: testElection_1	**Name(s) of Testers:** Roshina, Thomas, Linh
Test Description: Checks to see if the total votes function of the Election class behaves as expected.	
Automated: Yes X No _	The file is stored in project1/src/ElectionTest.java
Results: Pass X Fail _	testTotalVotes()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the total number of votes is 100.	Election in ElectionTest.java	100	100	

Postconditions for Test: None

testCoinTossOne

Test Stage: Unit X System _	**Test Date:** 03/14/21
Test Case ID#: testElection_2	**Name(s) of Testers:** Roshina, Thomas, Linh
Test Description: Checks to see if the coin toss function of the Election class behaves as expected.	
Automated: Yes X No _	The file is stored in project1/src/ElectionTest.java
Results: Pass X Fail _	testCoinTossOne()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the coin toss returns the only candidate passed in.	Election in ElectionTest.java	“cand1”	“cand1”	

Postconditions for Test: None

testCoinTossTwo

Test Stage: Unit X System _	**Test Date:** 03/14/21
Test Case ID#: testElection_3	**Name(s) of Testers:** Roshina, Thomas, Linh
Test Description: Checks to see if the coin toss function of the Election class behaves as expected.	
Automated: Yes X No _	**The file is stored in project1/src/ElectionTest.java**
Results: Pass X Fail _	**testCoinTossTwo()**

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check if the coin toss returns a candidate with the correct party name.	Election in ElectionTest.java	“party1”	“party1”	

Postconditions for Test: None

testCoinTossThree

Test Stage: Unit X System _	**Test Date:** 03/14/21
Test Case ID#: testElection_4	**Name(s) of Testers:** Roshina, Thomas, Linh
Test Description: Checks to see if the coin toss function of the Election class behaves as expected.	
Automated: Yes X No _	**The file is stored in project1/src/ElectionTest.java**
Results: Pass X Fail _	**testCoinTossThree()**

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check if the coin toss returns a candidate with the correct number of votes.	Election in ElectionTest.java	True	True	

Postconditions for Test: None

testSetTotalVotes

Test Stage: Unit X System _	**Test Date:** 03/14/21
Test Case ID#: testElection_5	**Name(s) of Testers:** Roshina, Thomas, Linh
Test Description: Checks to see if the set and get total vote functions of the Election class behave as expected.	
Automated: Yes X No _	The file is stored in project1/src/ElectionTest.java
Results: Pass X Fail _	testSetTotalVotes()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the number of total votes is correct.	Election in ElectionTest.java	100	100	

Postconditions for Test: None

testAppendMediaFile

Test Stage: Unit X System _	**Test Date:** 03/27/21
Test Case ID#: testElection_6	**Name(s) of Testers:** Roshina, Thomas, Linh
Test Description: Checks to see if the append method of the Election class does not return an error.	
Automated: Yes X No _	The file is stored in project1/src/ElectionTest.java
Results: Pass X Fail _	testAppendMediaFile()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Run the function without an exception being thrown.	Election in ElectionTest.java	*No exception thrown*	*No exception thrown*	

Postconditions for Test: None

testAppendAuditFile

Test Stage: Unit X System _	**Test Date:** 03/27/21
Test Case ID#: testElection_7	**Name(s) of Testers:** Roshina, Thomas, Linh
Test Description: Checks to see if the append method of the Election class does not return an error.	
Automated: Yes X No _	The file is stored in project1/src/ElectionTest.java
Results: Pass X Fail _	testAppendAuditFile()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Run the function without an exception being thrown.	Election in ElectionTest.java	*No exception thrown*	*No exception thrown*	

Postconditions for Test: None

Instant Runoff Tests

testPrepareData

Test Stage: Unit X System _	**Test Date:** 03/14/21
Test Case ID#: testIRV_1	**Name(s) of Testers:** Roshina, Thomas, Linh
Test Description: Checks to see if the instant runoff function prepareData behaves as expected.	
Automated: Yes X No _	The file is stored in project1/src/InstantRunoffTest.java testPrepareData()
Results: Pass X Fail _	

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the number of candidates is 4.	fakeReader in InstantRunoffTest .java	4	4	
2	Check that the number of votes is 6.	fakeReader in InstantRunoffTest .java	6	6	

Postconditions for Test: None

testPrepareDataEmpty

Test Stage: Unit X System _
Test Case ID#: testIRV_2
Test Description: Checks to see if the instant runoff function prepareData behaves as expected when there are no candidates or ballots.

Automated: Yes X No _
Results: Pass X Fail _

Test Date: 03/27/21
Name(s) of Testers: Roshina, Thomas, Linh

The file is stored in project1/src/InstantRunoffTest.java
testPrepareDataEmpty()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the number of candidates is 0.	fakeReader2 in InstantRunoffTest .java	0	0	
2	Check that the number of votes is 0.	fakeReader2 in InstantRunoffTest .java	0	0	

Postconditions for Test: None

testEliminateMin

Test Stage: Unit X System _	**Test Date:** 03/14/21
Test Case ID#: testIRV_3	**Name(s) of Testers:** Roshina, Thomas, Linh
Test Description: Checks to see if the instant runoff function eliminateMin behaves as expected.	
Automated: Yes X No _	The file is stored in project1/src/InstantRunoffTest.java testEliminateMin()
Results: Pass X Fail _	

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the eliminated candidate is correct.	fakeReader in InstantRunoffTest .java	“Kleinberg”	“Kleinberg”	

Postconditions for Test: None

testEliminateMinTied

Test Stage: Unit X System _	**Test Date:** 03/27/21
Test Case ID#: testIRV_4	**Name(s) of Testers:** Roshina, Thomas, Linh
Test Description: Checks to see if the instant runoff function eliminateMin behaves as expected on a tied candidate list.	
Automated: Yes X No _	The file is stored in project1/src/InstantRunoffTest.java
Results: Pass X Fail _	testEliminateMinTied()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the eliminated candidate is one of the tied candidates.	fakeReader3 in InstantRunoffTest .java	True	True	

Postconditions for Test: None

testRedistributeVotes

Test Stage: Unit X System _
Test Case ID#: testIRV_5
Test Description: Checks to see if the instant runoff function redistributeVotes behaves as expected.

Test Date: 03/14/21
Name(s) of Testers: Roshina, Thomas, Linh

Automated: Yes X No _
Results: Pass X Fail _

The file is stored in project1/src/InstantRunoffTest.java
testRedistributeVotes()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check the initial votes for Chou.	fakeReader in InstantRunoffTest.java	2	2	
2	Check the initial votes for Kleinberg.	fakeReader in InstantRunoffTest.java	0	0	
3	Check the initial votes for Royce.	fakeReader in InstantRunoffTest.java	1	1	
4	Check the votes for Kleinberg after redistributing Chou's votes.	fakeReader in InstantRunoffTest.java	1	1	
5	Check the votes for Royce after redistributing Chou's votes.	fakeReader in InstantRunoffTest.java	2	2	

Postconditions for Test: None

testRedistributeVotesTwice

Test Stage: Unit X System _
Test Case ID#: testIRV_6
Test Description: Checks to see if the instant runoff function redistributeVotes behaves as expected when done twice in a row.

Automated: Yes X No _
Results: Pass X Fail _

Test Date: 03/27/21
Name(s) of Testers: Roshina, Thomas, Linh

The file is stored in project1/src/InstantRunoffTest.java
testRedistributeVotesTwice()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check the initial votes for candidate 1.	fakeReader3 in InstantRunoffTest.java	1	1	
2	Check the initial votes for candidate 2.	fakeReader3 in InstantRunoffTest.java	1	1	
3	Check the initial votes for candidate 3.	fakeReader3 in InstantRunoffTest.java	2	2	
4	Check the votes for candidate 3 after redistributing 1 and 2's votes.	fakeReader3 in InstantRunoffTest.java	4	4	

Postconditions for Test: None

testGetSetRunoffVotes

Test Stage: Unit X System _
Test Date: 03/27/21
Test Case ID#: testIRV_7
Name(s) of Testers: Roshina, Thomas, Linh
Test Description: Checks to see if the instant runoff methods getRunoffVotes and setRunoffVotes behaves as expected.

Automated: Yes X No _
Results: Pass X Fail _
The file is stored in project1/src/InstantRunoffTest.java
testGetSetRunoffVotes()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the number of runoff votes is correct the first time.	fakeReader in InstantRunoffTest .java	0	0	
2	Check that the number of runoff votes is correct the second time.	fakeReader in InstantRunoffTest .java	10	10	

Postconditions for Test: None

Open Party List Tests

testPrepareData

Test Stage: Unit X System _	**Test Date:** 03/14/21
Test Case ID#: testOPL_1	**Name(s) of Testers:** Roshina, Thomas, Linh
Test Description: Checks to see if the open party list function prepareData behaves as expected.	
Automated: Yes X No _	The file is stored in project1/src/OpenPartyListTest.java
Results: Pass X Fail _	testPrepareData()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the open party list size is 3.	fakeReader in OpenPartyListTest.java	3	3	
2	Check that the number of votes is 9.	fakeReader in OpenPartyListTest.java	9	9	

Postconditions for Test: None

testGenerateParticipants

Test Stage: Unit X System _
Test Case ID#: testOPL_2
Test Description: Checks to see if the open party list function generateParticipants behaves as expected.

Test Date: 03/20/21
Name(s) of Testers: Roshina, Thomas, Linh

Automated: Yes X No _
Results: Pass X Fail _

The file is stored in project1/src/OpenPartyListTest.java
testGenerateParticipants()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the first candidate was correctly added to the ‘R’ party.	fakeReader in OpenPartyListTest.java	"Deutsch"	"Deutsch"	
2	Check that the second candidate was correctly added to the ‘R’ party.	fakeReader in OpenPartyListTest.java	"Borg"	"Borg"	
3	Check that the third candidate was correctly added to the ‘R’ party.	fakeReader in OpenPartyListTest.java	"Jones"	"Jones"	
4	Check that the fourth candidate was correctly added to the ‘D’ party.	fakeReader in OpenPartyListTest.java	"Pike"	"Pike"	
5	Check that the fifth candidate was correctly added to the ‘D’ party.	fakeReader in OpenPartyListTest.java	"Foster"	"Foster"	
6	Check that the sixth candidate was correctly added to the ‘I’ party.	fakeReader in OpenPartyListTest.java	"Smith"	"Smith"	

Postconditions for Test: None

testAllocateSeats

Test Stage: Unit X System _
Test Case ID#: testOPL_3
Test Description: Checks to see if the open party list function testAllocateSeats behaves as expected.

Test Date: 03/14/21
Name(s) of Testers: Roshina, Thomas, Linh

Automated: Yes X No _
Results: Pass X Fail _

The file is stored in project1/src/OpenPartyListTest.java
testAllocateSeats()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the number of votes is 1.	fakeReader in OpenPartyListTest.java	1	1	
2	Check that the number of votes is 1.	fakeReader in OpenPartyListTest.java	1	1	
3	Check that the number of votes is 0.	fakeReader in OpenPartyListTest.java	0	0	

Postconditions for Test: None

testCheckRemainingSeats

Test Stage: Unit X System _
Test Case ID#: testOPL_4
Test Description: Checks to see if the open party list function testCheckRemainingSeats behaves as expected.

Automated: Yes X No _
Results: Pass X Fail _

Test Date: 03/14/21
Name(s) of Testers: Roshina, Thomas, Linh

The file is stored in project1/src/OpenPartyListTest.java
testCheckRemainingSeats()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the number of seats is 1.	fakeReader in OpenPartyListTest.java	1	1	
2	Check that the number of seats is 2.	fakeReader in OpenPartyListTest.java	2	2	
3	Check that the number of seats is 0.	fakeReader in OpenPartyListTest.java	0	0	

Postconditions for Test: None

testGetLargestRemainingVotes

Test Stage: Unit X System _	**Test Date:** 03/14/21
Test Case ID#: testOPL_5	**Name(s) of Testers:** Roshina, Thomas, Linh
Test Description: Checks to see if the open party list function testGetLargestReaminingVotes behaves as expected.	
Automated: Yes X No _	The file is stored in project1/src/OpenPartyListTest.java
Results: Pass X Fail _	testGetLargestRemainingVotes()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the winner of the OPL is “D”	fakeReader in OpenPartyListTest.java	“D”	“D”	

Postconditions for Test: None

testCoinTossPartyOne

Test Stage: Unit X System _	**Test Date:** 03/27/21
Test Case ID#: testOPL_6	**Name(s) of Testers:** Roshina, Thomas, Linh
Test Description: Checks to see if the open party list function testCoinTossPartyOne behaves as expected.	
Automated: Yes X No _	The file is stored in project1/src/OpenPartyListTest.java
Results: Pass X Fail _	testCoinTossPartyOne()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the coin toss returns the name of the one party that is passed in.	fakeReader in OpenPartyListTest.java	"party1"	"party1"	

Postconditions for Test: None

testCoinTossPartyTwo

Test Stage: Unit X System _	**Test Date:** 03/27/21
Test Case ID#: testOPL_7	**Name(s) of Testers:** Roshina, Thomas, Linh
Test Description: Checks to see if the open party list function testCoinTossPartyTwo behaves as expected.	
Automated: Yes X No _	The file is stored in project1/src/OpenPartyListTest.java
Results: Pass X Fail _	testCoinTossPartyTwo()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the coin toss returns one of the two parties that are passed in.	fakeReader in OpenPartyListTest.java	True	True	

Postconditions for Test: None

testAllocateRemainingSeats

Test Stage: Unit X System _
Test Case ID#: testOPL_8
Test Description: Checks to see if the open party list function testAllocateRemainingSeats behaves as expected.

Automated: Yes X No _
Results: Pass X Fail _

Test Date: 03/14/21
Name(s) of Testers: Roshina, Thomas, Linh

The file is stored in project1/src/OpenPartyListTest.java
testAllocateReaminingSeats()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check if the number of seats is 1.	fakeReader in OpenPartyListTest.java	1	1	
2	Check if the number of seats is 2.	fakeReader in OpenPartyListTest.java	2	2	
3	Check if the number of seats is 0.	fakeReader in OpenPartyListTest.java	0	0	

Postconditions for Test: None

testGetPartyList

Test Stage: Unit X System _	**Test Date:** 03/27/21
Test Case ID#: testOPL_9	**Name(s) of Testers:** Roshina, Thomas, Linh
Test Description: Checks to see if the open party list function getPartyList behaves as expected.	
Automated: Yes X No _	The file is stored in project1/src/OpenPartyListTest.java
Results: Pass X Fail _	testGetPartyList()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check if the party list has the correct size.	fakeReader in OpenPartyListTest.java	3	3	

Postconditions for Test: None

testSetQuota

Test Stage: Unit X System _
Test Date: 03/27/21
Test Case ID#: testOPL_10
Name(s) of Testers: Roshina, Thomas, Linh
Test Description: Checks to see if the open party list functions getQuota and setQuota behave as expected.

Automated: Yes X No _
Results: Pass X Fail _
The file is stored in project1/src/OpenPartyListTest.java testSetQuota()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check if the quota is correct.	fakeReader in OpenPartyListTest.java	10	10	

Postconditions for Test: None

Party Tests

testPartyConstructor1

Test Stage: Unit X System _
Test Case ID#: testParty_1
Test Description: Checks to see if the party constructor 1 behaves as expected.

Test Date: 03/14/21
Name(s) of Testers: Roshina, Thomas, Linh

Automated: Yes X No _
Results: Pass X Fail _

The file is stored in project1/src/PartyTest.java
testPartyConstructor1()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that Party() returns an empty string.	party1 in PartyTest.java	“”	“”	
2	Check that Party() has a null candidate list.	party1 in PartyTest.java	null	null	
3	Check that Party() returns no party votes.	party1 in PartyTest.java	0	0	
4	Check that Party() returns no party seats.	party1 in PartyTest.java	0	0	

Postconditions for Test: None

testPartyConstructor2

Test Stage: Unit X System _
Test Case ID#: testParty_2
Test Description: Checks to see if the party constructor 2 behaves as expected.

Test Date: 03/14/21
Name(s) of Testers: Roshina, Thomas, Linh

Automated: Yes X No _
Results: Pass X Fail _

The file is stored in project1/src/PartyTest.java
testPartyConstructor2()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that Party(string) returns the correct name.	party2 in PartyTest.java	“Republic”	“Republic”	
2	Check that Party(string) has a null candidate list.	party2 in PartyTest.java	null	null	
3	Check that Party(string) returns no party votes.	party2 in PartyTest.java	0	0	
4	Check that Party(string) returns no party seats.	party2 in PartyTest.java	0	0	

Postconditions for Test: None

testPartyConstructor3

Test Stage: Unit X System _
Test Case ID#: testParty_3
Test Description: Checks to see if the party constructor 3 behaves as expected.

Automated: Yes X No _
Results: Pass X Fail _

Test Date: 03/14/21
Name(s) of Testers: Roshina, Thomas, Linh

The file is stored in project1/src/PartyTest.java
testPartyConstructor3()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
9	Check that Party(string, ArrayList<Candidate>) returns the correct name.	party3 in PartyTest.java	“Liberal”	“Liberal”	
10	Check that Party(string, ArrayList<Candidate>) returns the correct candidate 0.	party3 in PartyTest.java	“Tester1”	“Tester1”	
11	Check that Party(string, ArrayList<Candidate>) returns the correct candidate 1.	party3 in PartyTest.java	“Tester2”	“Tester2”	
12	Check that Party(string, ArrayList<Candidate>) returns the correct number of votes.	party3 in PartyTest.java	420	420	
13	Check that Party(string, ArrayList<Candidate>) returns the correct number of seats.	party3 in PartyTest.java	0	0	

Postconditions for Test: None

testPartySetters

Test Stage: Unit X System _	**Test Date:** 03/14/21
Test Case ID#: testParty_4	**Name(s) of Testers:** Roshina, Thomas, Linh
Test Description: Checks to see if the party setters behave as expected.	
Automated: Yes X No _	**The file is stored in project1/src/PartyTest.java**
Results: Pass X Fail _	**testPartySetters()**

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that setting the candidate list works for candidate 1.	party1 in PartyTest.java	“Tester1”	“Tester1”	
2	Check that setting the candidate list works for candidate 2.	party1 in PartyTest.java	“Tester2”	“Tester2”	
3	Check that setting the party seats works.	party1 in PartyTest.java	2	2	
4	Check that setting the party votes works.	party1 in PartyTest.java	100	100	

Postconditions for Test: None

testGetTopXCandidates

Test Stage: Unit X System _
Test Date: 03/14/21
Test Case ID#: testParty_5
Name(s) of Testers: Roshina, Thomas, Linh
Test Description: Checks to see if the getTopXCandidates method works as expected.

Automated: Yes X No _
Results: Pass X Fail _
The file is stored in project1/src/PartyTest.java
testGetTopXCandidates()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that getting the top two candidates returns the correct number of candidates.	party3 in PartyTest.java	2	2	
2	Check that getting the top two candidates returns the correct candidate 1.	party3 in PartyTest.java	true	true	
3	Check that getting the top two candidates returns the correct candidate 2.	party3 in PartyTest.java	true	true	

Postconditions for Test: None

System Tests

testIR_given

Test Stage: Unit _ System X	**Test Date:** 03/20/21
Test Case ID#: testIR_1	**Name(s) of Testers:** Roshina, Thomas, Linh
Test Description: Checks to see if the running the system on IR_given.csv gives the expected results.	
Automated: Yes X No _	The file is stored in project1/src/SystemTest.java
Results: Pass X Fail _	testIR_given()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the voting method is instant runoff.	IR_given.csv	"Voting Method: Instant Runoff"	"Voting Method: Instant Runoff"	
2	Check that the winner of the election is Rosen.	IR_given.csv	"Winner(s) of election: Rosen (D)"	"Winner(s) of election: Rosen (D)"	
3	Check the number of ballots cast in the election.	IR_given.csv	"Number of ballots cast: 6"	"Number of ballots cast: 6"	

Postconditions for Test: None

testIR_runofftie

Test Stage: Unit _ System X
Test Case ID#: testIR_2
Test Description: Checks to see if the running the system on IR_runofftie.csv gives the expected results.

Test Date: 03/20/21
Name(s) of Testers: Roshina, Thomas, Linh

Automated: Yes X No _
Results: Pass X Fail _

The file is stored in project1/src/SystemTest.java
testIR_runofftie()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Read the .csv file and determine the voting method to perform.	IR_runofftie.csv	"Voting Method: Instant Runoff"	"Voting Method: Instant Runoff"	
2	Run the IR voting method and determine the winner.	IR_runofftie.csv	"Winner(s) of election: Candidate Blue (Blue Party)"	"Winner(s) of election: Candidate Blue (Blue Party)"	
3	Check the number of ballots cast in the election.	IR_runofftie.csv	"Number of ballots cast: 7"	"Number of ballots cast: 7"	

Postconditions for Test: None

testIR_tie

Test Stage: Unit _ System X	**Test Date:** 03/20/21
Test Case ID#: testIR_3	**Name(s) of Testers:** Roshina, Thomas, Linh
Test Description: Checks to see if the running the system on IR_tie.csv gives the expected results.	
Automated: Yes X No _	**The file is stored in project1/src/SystemTest.java**
Results: Pass X Fail _	**testIR_tie()**

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the voting method is instant runoff.	IR_tie.csv	"Voting Method: Instant Runoff"	"Voting Method: Instant Runoff"	
2	Check that the winner is one of the tied candidates.	IR_tie.csv	True	True	
3	Check the number of ballots cast in the election.	IR_tie.csv	"Number of ballots cast: 2"	"Number of ballots cast: 2"	

Postconditions for Test: None

testIR_tie3way

Test Stage: Unit _ System X
Test Case ID#: testIR_4
Test Description: Checks to see if the running the system on IR_tie3way.csv gives the expected results.

Automated: Yes X No _
Results: Pass X Fail _

Test Date: 03/27/21
Name(s) of Testers: Roshina, Thomas, Linh

The file is stored in project1/src/SystemTest.java
testIR_tie3way()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Read the .csv file and determine the voting method to perform.	IR_tie(3way).csv	"Voting Method: Instant Runoff"	"Voting Method: Instant Runoff"	
2	Check that the winner is one of the tied candidates.	IR_tie(3way).csv	True	True	
3	Check the number of ballots cast in the election.	IR_tie(3way).csv	"Number of ballots cast: 8"	"Number of ballots cast: 8"	

Postconditions for Test: None

testOPL_given

Test Stage: Unit _ System X
Test Date: 03/20/21
Test Case ID#: testOPL_1
Name(s) of Testers: Roshina, Thomas, Linh
Test Description: Checks to see if the running the system on OPL_given.csv gives the expected results.

Automated: Yes X No _
Results: Pass X Fail _

The file is stored in project1/src/SystemTest.java
testOPL_given()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the voting method is open party list.	OPL_given.csv	"Voting Method: Open Party List"	"Voting Method: Open Party List"	
2	Check that the winners of the election is correct	OPL_given.csv	"Winner(s) of election: Borg (R), Pike (D), Foster (D)"	"Winner(s) of election: Borg (R), Pike (D), Foster (D)"	
3	Check the number of ballots cast.	OPL_given.csv	"Number of ballots cast: 9"	"Number of ballots cast: 9"	

Postconditions for Test: None

testOPL_moreSeatsThanCapacity

Test Stage: Unit _ System X
Test Case ID#: testOPL_2
Test Description: Checks to see if the running the system on testOPL_moreSeatsThanCapacity.csv gives the expected results.

Automated: Yes X No _
Results: Pass X Fail _

Test Date: 03/20/21
Name(s) of Testers: Roshina, Thomas, Linh

The file is stored in project1/src/SystemTest.java
testOPL_moreSeatsThanCapacity()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the voting method is open party list.	OPL_moreSeatsThanCapacity.csv	"Voting Method: Open Party List"	"Voting Method: Open Party List"	
2	Check that the winners of the election is correct.	OPL_moreSeatsThanCapacity.csv	"Winner(s) of election: Borg (R), Pike (D), Foster (D)"	"Winner(s) of election: Borg (R), Pike (D), Foster (D)"	

Postconditions for Test: None

testOPL_onePartyWinAll

Test Stage: Unit _ System X
Test Date: 03/27/21
Test Case ID#: testOPL_3
Name(s) of Testers: Roshina, Thomas, Linh
Test Description: Checks to see if the running the system on testOPL_onePartyWinAll.csv gives the expected results.

Automated: Yes X No _
Results: Pass X Fail _

The file is stored in project1/src/SystemTest.java
testOPL_onePartyWinAll()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the voting method is open party list.	OPL_onePartyWinAll.csv	"Voting Method: Open Party List"	"Voting Method: Open Party List"	
2	Check that the first candidate winning is from the correct party.	OPL_onePartyWinAll.csv	"(D),"	"(D),"	
3	Check that the second candidate winning is from the correct party.	OPL_onePartyWinAll.csv	"(D),"	"(D),"	
4	Check that the third candidate winning is from the correct party.	OPL_onePartyWinAll.csv	"(D)"	"(D)"	
5	Check the number of ballots cast.	OPL_onePartyWinAll.csv	"Number of ballots cast: 13"	"Number of ballots cast: 13"	

Postconditions for Test: None

testOPL_tie2TieChoose1

Test Stage: Unit _ System X
Test Case ID#: testOPL_4
Test Description: Checks to see if the running the system on testOPL_tie2TieChoose1.csv gives the expected results.

Test Date: 03/27/21
Name(s) of Testers: Roshina, Thomas, Linh

Automated: Yes X No _
Results: Pass X Fail _

The file is stored in project1/src/SystemTest.java
testOPL_tie2TieChoose1()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the voting method is open party list.	OPL_tie(2TieChoose1).csv	"Voting Method: Open Party List"	"Voting Method: Open Party List"	
2	Check that the winner is one of the tied candidates.	OPL_tie(2TieChoose1).csv	True	True	
3	Check the number of ballots cast.	OPL_tie(2TieChoose1).csv	"Number of ballots cast: 7"	"Number of ballots cast: 7"	

Postconditions for Test: None

testOPL_tie3TieChoose1

Test Stage: Unit _ System X
Test Case ID#: testOPL_5
Test Description: Checks to see if the running the system on testOPL_tie3TieChoose1.csv gives the expected results.

Test Date: 03/27/21
Name(s) of Testers: Roshina, Thomas, Linh

Automated: Yes X No _
Results: Pass X Fail _

The file is stored in project1/src/SystemTest.java
testOPL_tie3TieChoose1()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the voting method is open party list.	OPL_tie(3TieChoose1).csv	"Voting Method: Open Party List"	"Voting Method: Open Party List"	
2	Check that the winner is one of the tied candidates.	OPL_tie(3TieChoose1).csv	True	True	
3	Check the number of ballots cast.	OPL_tie(3TieChoose1).csv	"Number of ballots cast: 9"	"Number of ballots cast: 9"	

Postconditions for Test: None

testOPL_tie3TieChoose2

Test Stage: Unit _ System X
Test Date: 03/27/21
Test Case ID#: testOPL_6
Name(s) of Testers: Roshina, Thomas, Linh
Test Description: Checks to see if the running the system on testOPL_tie3TieChoose2.csv gives the expected results.

Automated: Yes X No _
Results: Pass X Fail _
The file is stored in project1/src/SystemTest.java testOPL_tie3TieChoose2()

Postconditions for Test: None

Step #	Test Step Description	Test Data	Expected Result	Actual Result	Notes
1	Check that the voting method is open party list.	OPL_tie(3TieChoose1).csv	"Voting Method: Open Party List"	"Voting Method: Open Party List"	
2	Check that the first winner is one of the tied candidates.	OPL_tie(3TieChoose1).csv	True	True	
3	Check that the second winner is one of the tied candidates.	OPL_tie(3TieChoose1).csv	True	True	
4	Check the number of ballots cast.	OPL_tie(3TieChoose1).csv	"Number of ballots cast: 9"	"Number of ballots cast: 9"	

Postconditions for Test: None