

**Project Name: Project 1: Voting System****Team# 3****Test Stage:** Unit \_\_\_ System X**Test Date:** 3/26**Test Case ID#:** IR\_run**Name(s) of Testers:** Theodore + Phuong**Test Description:**

Run the IR file from Election.java(main)  
and be able to produce an audit file (audit)

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

**Election.java**

IR.java

IR\_Ballot.java

IR\_Candidate.java

IR\_Audit\_File.java

IR\_ElectionTest.java

IRtest.csv

**Automated:** yes no X**Results:** Pass X Fail**Preconditions for Test:**

the IRtest.csv should contain information for IR election.

| Step # | Test Step Description  | Test Data  | Expected Result                       | Actual Result                         | Notes |
|--------|--|------------|---------------------------------------|---------------------------------------|-------|
| 1      |  |            |                                       |                                       |       |
| 2      | Run the Election.java  | n/a        | ask user prompt in file path          | ask user prompt in the file path      |       |
| 3      | prompt in file path  | n/a        | run the program and output audit file | run the program and output audit file |       |
| 4      | Alternative: if no file detected, prompt the user to enter the file again.<br>Or type in "Exist" to exist the program. | IRtest.csv | successfully produced an audit file.  | successfully produced an audit file   |       |
|        |  |            |                                       |                                       |       |
|        |  |            |                                       |                                       |       |

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**Post condition(s) for Test:**

An audit file will be produce contain all information for IR election.

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**Project Name: Project 1: Voting System**

**Team# 3**

**Test Stage:** Unit   X   System   

**Test Date:** 3/26

**Test Case ID#:** testInitialData

**Name(s) of Testers:** Theodore + Phuong

**Test Description:**

test the initial data is used in the constructor to see if it initial the data correctly

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

IR.java  
IR\_Candidate.java  
IR\_Ballot.java  
IRtest.csv  
IR\_ElectionTest.java

**Automated:** yes   X   no   

**Results:** Pass   X   Fail   

**Preconditions for Test:**

obtain the IRtest.csv and path to the file

| Step # | Test Step Description                   | Test Data              | Expected Result   | Actual Result                                      | Notes  |
|--------|---|------------------------|---|--|--|
| 1      |   |                        |   |  |  |
| 2      | check to see if IRtest.csv is available | IRtest.csv             | IRtest.csv should be in the same directory as IR files. | IRtest.csv is in the same directory as IR files.   | different path name as user choose where to store the file |
| 3      | put the path into string path           | path to the IRtest.txt | should obtain the path to the file and put into path.   | success on obtain the file path and put into path. | Should be at the beginning of the ElectionTestIR.java      |
| 4      | run the test                            |                        | pass  | pass   |  |
|        |   |                        |   |  |  |
|        |   |                        |   |  |  |

**Post condition(s) for Test:**

The test should pass.

**Project Name: Project 1: Voting System****Team# 3****Test Stage:** Unit   X   System   **Test Date:** 3/26**Test Case ID#:** testpopulateData**Name(s) of Testers:** Theodore + Phuong**Test Description:**

test the populate data is used in the constructor to see  
if it populated the data correctly

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

IR.java  
IR\_Candidate.java  
IR\_Ballot.java  
IRtest.csv  
IR\_ElectionTest.java

**Automated:** yes   X   no**Results:** Pass   X   Fail**Preconditions for Test:**

obtain the IRtest.csv and path to the file

| Step # | Test Step Description                   | Test Data              | Expected Result   | Actual Result                                      | Notes  |
|--------|---|------------------------|---|--|--|
| 1      |   |                        |   |  |  |
| 2      | check to see if IRtest.csv is available | IRtest.csv             | IRtest.csv should be in the same directory as IR files. | IRtest.csv is in the same directory as IR files.   | different path name as user choose where to store the file |
| 3      | put the path into string path           | path to the IRtest.txt | should obtain the path to the file and put into path.   | success on obtain the file path and put into path. | Should be at the beginning of the ElectionTestIR.java      |
| 4      | run the test                            |                        | pass  | pass   |  |
|        |   |                        |   |  |  |
|        |   |                        |   |  |  |

**Post condition(s) for Test:**

The test should pass.

**Project Name: Project 1: Voting System**

**Team# 3**

**Test Stage:** Unit   X   System   

**Test Date:** 3/26

**Test Case ID#:** testgetCandidates

**Name(s) of Testers:** Theodore + Phuong

**Test Description:**

test the candidates constructor to see  
if it populated the data correctly

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

IR.java  
IR\_Candidate.java  
IR\_Ballot.java  
IRtest.csv  
IR\_ElectionTest.java

**Automated:** yes   X   no   

**Results:** Pass   X   Fail   

**Preconditions for Test:**

obtain the IRtest.csv and path to the file

| Step # | Test Step Description                   | Test Data              | Expected Result   | Actual Result                                      | Notes  |
|--------|---|------------------------|---|--|--|
| 1      |   |                        |   |  |  |
| 2      | check to see if IRtest.csv is available | IRtest.csv             | IRtest.csv should be in the same directory as IR files. | IRtest.csv is in the same directory as IR files.   | different path name as user choose where to store the file |
| 3      | put the path into string path           | path to the IRtest.txt | should obtain the path to the file and put into path.   | success on obtain the file path and put into path. | Should be at the beginning of the ElectionTestIR.java      |
| 4      | run the test                            |                        | pass  | pass   |  |
|        |   |                        |   |  |  |
|        |   |                        |   |  |  |

**Post condition(s) for Test:**

The test should pass.

**Project Name: Project 1: Voting System**

**Team# 3**

**Test Stage:** Unit   X   System   

**Test Date:** 3/26

**Test Case ID#:** tesgetNumCandidates

**Name(s) of Testers:** Theodore + Phuong

**Test Description:**

test the numCandidate data to see  
if it populated the data correctly

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

IR.java  
IR\_Candidate.java  
IR\_Ballot.java  
IRtest.csv  
IR\_ElectionTest.java

**Automated:** yes   X   no   

**Results:** Pass   X   Fail   

**Preconditions for Test:**

obtain the IRtest.csv and path to the file

| Step # | Test Step Description                   | Test Data              | Expected Result   | Actual Result                                      | Notes  |
|--------|---|------------------------|---|--|--|
| 1      |   |                        |   |  |  |
| 2      | check to see if IRtest.csv is available | IRtest.csv             | IRtest.csv should be in the same directory as IR files. | IRtest.csv is in the same directory as IR files.   | different path name as user choose where to store the file |
| 3      | put the path into string path           | path to the IRtest.txt | should obtain the path to the file and put into path.   | success on obtain the file path and put into path. | Should be at the beginning of the ElectionTestIR.java      |
| 4      | run the test                            |                        | pass  | pass   |  |
|        |   |                        |   |  |  |
|        |   |                        |   |  |  |

**Post condition(s) for Test:**

The test should pass.

**Project Name: Project 1: Voting System**

**Team# 3**

**Test Stage:** Unit   X   System   

**Test Date:** 3/26

**Test Case ID#:** testgetNumBallots

**Name(s) of Testers:** Theodore + Phuong

**Test Description:**

test the ballots data is used in the constructor to see if it populated the data correctly

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

IR.java  
IR\_Candidate.java  
IR\_Ballot.java  
IRtest.csv  
IR\_ElectionTest.java

**Automated:** yes   X   no   

**Results:** Pass   X   Fail   

**Preconditions for Test:**

obtain the IRtest.csv and path to the file

| Step # | Test Step Description                   | Test Data              | Expected Result   | Actual Result                                      | Notes  |
|--------|---|------------------------|---|--|--|
| 1      |   |                        |   |  |  |
| 2      | check to see if IRtest.csv is available | IRtest.csv             | IRtest.csv should be in the same directory as IR files. | IRtest.csv is in the same directory as IR files.   | different path name as user choose where to store the file |
| 3      | put the path into string path           | path to the IRtest.txt | should obtain the path to the file and put into path.   | success on obtain the file path and put into path. | Should be at the beginning of the ElectionTestIR.java      |
| 4      | run the test                            |                        | pass  | pass   |  |
|        |   |                        |   |  |  |
|        |   |                        |   |  |  |

**Post condition(s) for Test:**

The test should pass.

**Project Name: Project 1: Voting System**

**Team# 3**

**Test Stage:** Unit   X   System   

**Test Date:** 3/26

**Test Case ID#:** testUpdateCurrentVote

**Name(s) of Testers:** Theodore + Phuong

**Test Description:**

test the currentVote data is used to see  
if it populated the data correctly

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

IR.java  
IR\_Candidate.java  
IR\_Ballot.java  
IRtest.csv  
IR\_ElectionTest.java

**Automated:** yes   X   no   

**Results:** Pass   X   Fail   

**Preconditions for Test:**

obtain the IRtest.csv and path to the file

| Step<br># | Test Step<br>Description                   | Test<br>Data           | Expected<br>Result   | Actual<br>Result                                      | Notes   |
|-----------|--|------------------------|--|---|---|
| 1         |  |                        |  |   |   |
| 2         | check to see if IRtest.csv is<br>available | IRtest.csv             | IRtest.csv should be in the same<br>directory as IR files. | IRtest.csv is in the same directory as IR<br>files.   | different path name as user<br>choose where to store the file |
| 3         | put the path into string path              | path to the IRtest.txt | should obtain the path to the file<br>and put into path.   | success on obtain the file path and put into<br>path. | Should be at the beginning of<br>the ElectionTestIR.java      |
| 4         | run the test                               |                        | pass   | pass  |   |
|           |  |                        |  |   |   |
|           |  |                        |  |   |   |

**Post condition(s) for Test:**

The test should pass.



**Project Name: Project 1: Voting System**

**Team# 3**

**Test Stage:** Unit   X   System   

**Test Date:** 3/26

**Test Case ID#:** makeTestFile

**Name(s) of Testers:** Theodore + Phuong

**Test Description:**

test to see if it can generate the ballots test file.

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

IR.java  
IR\_Candidate.java  
IR\_Ballot.java  
IRtest.csv  
IR\_ElectionTest.java  
IR\_Make\_Test\_File.java

**Automated:** yes   X   no   

**Results:** Pass   X   Fail   

**Preconditions for Test:**

obtain the IRtest.csv and path to the file

| Step # | Test Step Description                   | Test Data              | Expected Result   | Actual Result                                      | Notes  |
|--------|---|------------------------|---|--|--|
| 1      |   |                        |   |  |  |
| 2      | check to see if IRtest.csv is available | IRtest.csv             | IRtest.csv should be in the same directory as IR files. | IRtest.csv is in the same directory as IR files.   | different path name as user choose where to store the file |
| 3      | put the path into string path           | path to the IRtest.txt | should obtain the path to the file and put into path.   | success on obtain the file path and put into path. | Should be at the beginning of the ElectionTestIR.java      |
| 4      | run the test                            |                        | pass  | pass   |  |
|        |   |                        |   |  |  |
|        |   |                        |   |  |  |

**Post condition(s) for Test:**

The test should pass.

**Project Name: Project 1: Voting System**

**Team# 3**

**Test Stage:** Unit   X   System   

**Test Date:** 3/26

**Test Case ID#:** testSetElectionStatus

**Name(s) of Testers:** Theodore + Phuong

**Test Description:**

test to see if it can generate and set the correct winning candidate.

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

IR.java  
IR\_Candidate.java  
IR\_Ballot.java  
IRtest.csv  
IR\_ElectionTest.java

**Automated:** yes   X   no   

**Results:** Pass   X   Fail   

**Preconditions for Test:**

obtain the IRtest.csv and path to the file

| Step # | Test Step Description                   | Test Data              | Expected Result   | Actual Result                                      | Notes  |
|--------|---|------------------------|---|--|--|
| 1      |   |                        |   |  |  |
| 2      | check to see if IRtest.csv is available | IRtest.csv             | IRtest.csv should be in the same directory as IR files. | IRtest.csv is in the same directory as IR files.   | different path name as user choose where to store the file |
| 3      | put the path into string path           | path to the IRtest.txt | should obtain the path to the file and put into path.   | success on obtain the file path and put into path. | Should be at the beginning of the ElectionTestIR.java      |
| 4      | run the test                            |                        | pass  | pass   |  |
|        |   |                        |   |  |  |
|        |   |                        |   |  |  |

**Post condition(s) for Test:**

The test should pass.

**Project Name: Project 1: Voting System**

**Team# 3**

**Test Stage:** Unit   X   System   

**Test Date:** 3/26

**Test Case ID#:** testmakeLoser

**Name(s) of Testers:** Theodore + Phuong

**Test Description:**

test to see if we can correctly making a loser for each round of the election.

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

IR.java  
IR\_Candidate.java  
IR\_Ballot.java  
IRtest.csv  
IR\_ElectionTest.java

**Automated:** yes   X   no   

**Results:** Pass   X   Fail   

**Preconditions for Test:**

obtain the IRtest.csv and path to the file

| Step # | Test Step Description                   | Test Data              | Expected Result   | Actual Result                                      | Notes  |
|--------|---|------------------------|---|--|--|
| 1      |   |                        |   |  |  |
| 2      | check to see if IRtest.csv is available | IRtest.csv             | IRtest.csv should be in the same directory as IR files. | IRtest.csv is in the same directory as IR files.   | different path name as user choose where to store the file |
| 3      | put the path into string path           | path to the IRtest.txt | should obtain the path to the file and put into path.   | success on obtain the file path and put into path. | Should be at the beginning of the ElectionTestIR.java      |
| 4      | run the test                            |                        | pass  | pass   |  |
|        |   |                        |   |  |  |
|        |   |                        |   |  |  |

**Post condition(s) for Test:**

The test should pass.

**Project Name: Project 1: Voting System****Team# 3****Test Stage:** Unit   X   System   **Test Date:** 3/26**Test Case ID#:** testCoinToss**Name(s) of Testers:** Theodore + Phuong**Test Description:**

test the winning candidate is randomly picked when there is a tie in the election using coinToss().

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

IR.java  
IR\_Candidate.java  
IR\_Ballot.java  
IRtest.csv  
IR\_ElectionTest.java

**Automated:** yes   X   no   **Results:** Pass   X   (half of the time) Fail   **Preconditions for Test:**

obtain the IRtest.csv and path to the file

| Step # | Test Step Description                   | Test Data              | Expected Result   | Actual Result                                      | Notes  |
|--------|---|------------------------|---|--|--|
| 1      |   |                        |   |  |  |
| 2      | check to see if IRtest.csv is available | IRtest.csv             | IRtest.csv should be in the same directory as IR files. | IRtest.csv is in the same directory as IR files.   | different path name as user choose where to store the file |
| 3      | put the path into string path           | path to the IRtest.txt | should obtain the path to the file and put into path.   | success on obtain the file path and put into path. | Should be at the beginning of the ElectionTestIR.java      |
| 4      | run the test                            |                        | pass  | pass   |  |
|        |   |                        |   |  |  |
|        |   |                        |   |  |  |

**Post condition(s) for Test:**

The test should pass half of the time as it is 50/50.

**Project Name: Project 1: Voting System****Team# 3****Test Stage:** Unit   X   System   **Test Date:** 3/26**Test Case ID#:** testPoolSelect**Name(s) of Testers:** Theodore + Phuong**Test Description:**

test the winning candidate is randomly picked when there is a tie in the election using poolSelection().

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

IR.java  
IR\_Candidate.java  
IR\_Ballot.java  
IRtest.csv  
IR\_ElectionTest.java

**Automated:** yes   X   no   **Results:** Pass   X   (third of the time) Fail   **Preconditions for Test:**

obtain the IRtest.csv and path to the file

| Step # | Test Step Description                   | Test Data              | Expected Result   | Actual Result                                      | Notes  |
|--------|---|------------------------|---|--|--|
| 1      |   |                        |   |  |  |
| 2      | check to see if IRtest.csv is available | IRtest.csv             | IRtest.csv should be in the same directory as IR files. | IRtest.csv is in the same directory as IR files.   | different path name as user choose where to store the file |
| 3      | put the path into string path           | path to the IRtest.txt | should obtain the path to the file and put into path.   | success on obtain the file path and put into path. | Should be at the beginning of the ElectionTestIR.java      |
| 4      | run the test                            |                        | pass  | pass   |  |
|        |   |                        |   |  |  |
|        |   |                        |   |  |  |

**Post condition(s) for Test:**

The test should pass third of the time as there is at least 3 candidates in tie.