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| **Project Name: Project 1: Voting System Team#3** | |
| **Test Stage: Unit x \_\_ System \_\_** | **Test Date: 4/1/20** |
| **Test Case ID#: Plurality\_election\_record\_UT002** | **Name(s) of Testers: Colin Kluegel** |
| **Test Description:Tests that ballots are correctly distributed to all the candidates as expect** | **Test File: plurality\_election\_record\_UT.cc**  **Method: TEST\_F(PluralityElectionRecordTests, DistributeBallots)** |
| **Automated: yes\_x\_\_ no \_\_\_** | **Indicate where are you storing the tests (what file) and the name of the method/functions being used.** |
| **Results: Pass \_\_x\_\_\_ Fail\_\_\_\_\_\_\_\_** |  |
|  |  |
| **Preconditions for Test: 5 candidate objects and 5 ballot objects are created and put in candidate lists and ballot lists respectively. A new PluralityElectionRecord object is created with these lists** | |

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| **Step**  **#** | **Test Step**  **Description** | **Test**  **Data** | **Expected**  **Result** | **Actual**  **Result** | **Notes** |
| 1 | Call election record Distribute ballots method |  |  |  |  |
| 2 | Create a new ballot\_list and set it the return of election\_record->GetonDistributedBallotList() |  |  |  |  |
| 3 | Check that this ballot list is empty | Ballots list | Ballots list is empty | Ballots list is empty – test passed | List is empty because all the ballots have been distributed |
| 4 | Create a new candidate list, and set it to the return of election\_record->GetNonElectedCandidateList() |  |  |  |  |
| 5 |  |  | Size is 5 | Size is 5, test passed | List is still full of original candidates because they have not been moved to the winners or losers list |
|  | Check that size of candidate list size | Candidate list |  |  |  |
| 6 |  |  | Candidate id 1 has 3 ballots  Candidate id 2 has 2 ballots  All other candidates have 0 ballots | Candidate id 1 has 3 ballots  Candidate id 2 has 2 ballots  All other candidates have 0 ballots  Test passed |  |
|  | Iterate through candidate list checking number of ballots each candidate has | Candidate list |  |  |  |
|  | Iterate through candidate list checking number of ballots each candidate has |  |  |  |  |
|  |  |  |  |  |  |

**Post condition(s) for Test: NonDistributed ballot list is empty, candidates have been assigned their ballots and are still on the nonElectedCandidateList**



**Project Name:**  The project #, name of your system, and the team#

**Test Stage:** Indicate whether it is a unit test or a system test.

**Test Date:**  The date the test was performed.

**Test Case ID#:**  A unique ID is required. Decide on a naming convention and use numbering. Example: Ballot\_Shuffle\_1

**Name(s) of Testers:** List the names of anyone involved in running this test case.

**Test Description:**  Describe briefly the test objective.

**Automated:**  Indicate if the test is completely automated or being checked manually. (If you have methods running the tests and checking results, select “yes”. If you are manually checking results, indicate manual by selecting the “no.”)

**Results:** Indicate if the test passed or failed.

**Step #:** You will be listing the test steps in order. This number is the step number in the process.

**Test Step Description:** Details of the test step.

**Test Data:** What the test data will be for this step. Be clear on what the input data will be. If using a specific file, be clear on the name.

**Expected Result:** What result are you expecting from the program component or system.

**Actual Result:** What result were returned based on the test.

**Post condition for Test:** What will be true after the test has been run? Has the state of the system changed in any way?

**Notes:** Comments and notesfor you and your team members.