| **Project Name: Project 1: Voting System Team#08** | |
| --- | --- |
| **Test Stage: Unit \_x\_ System \_ \_** | **Test Date: 3/23/2023** |
| **Test Case ID#: ElectionFactory\_01** | **Name(s) of Testers: Dheva Subramaniam** |
| **Test Description:**   * Testing the static CreateElection() method in ElectionFactory to ensure correct derived type from Election is returned (or if an error is returned for invalid types) * This tests specifically for an invalid type identifier |  |
| **Automated: yes\_x\_ no \_\_\_ using Google Test** |  |
| **Results: Pass \_\_\_\_x\_\_\_ Fail\_\_\_\_\_\_\_\_** |  |
|  |  |
| **Preconditions for Test:**  N/A | |

| **Step**  **#** | **Test Step**  **Description** | **Test**  **Data** | **Expected**  **Result** | **Actual**  **Result** | **Notes** |
| --- | --- | --- | --- | --- | --- |
| 1 | Create an empty ifstream object | N/A | N/A | N/A | ifstream should not have the opportunity to be read into, so can be empty for sake of being able to pass as an argument in step 2 |
| 2 | Call ElectionFactory’s static CreateElection() method using test information | istream object generated from step 1, string with dummy date, string “INV” | runtime\_error | runtime\_error | This portion is contained in a try catch block so that the error message can be caught and checked as well. If an error is not thrown, the test is failed |
| 3 | Compare caught error message against expected output | Error message generated from the error thrown above | “Error: Invalid election type- "INV" is not supported” | “Error: Invalid election type- "INV" is not supported” | N/A |

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

Error is thrown, no derived Election types are created