**Task 3: Software Testing**

**Task 3a - Unit Test Plan**

|  |  |  |
| --- | --- | --- |
| **Test Case** | **Methods & Parameters** | **Expected Outputs** |
| Correct input | getResult (Positive) | -State changed |
| Correct input | getResult (Negative) | -State changed |
| Correct input | getResult(Undecided) | -State unchnaged |
| Incorrect inputs | getResult (East) | Error Message |
| Empty result | getResult (NULL) | -Error Message: Please type in your result |

**Task 3 b - System Test Plan**

**Use Case:** Enter Result

**Scenario:** Successful change to the State of the Result NEGATIVE.

|  |  |
| --- | --- |
| **Test Staff** | **Test Centre tracking System** |
| 1.Enter Test result | 2.Check Result/State |
|  | 3. if Results == NEGATIVE change State to GREEN no matter what state it is in |
|  | 4. State changed to GREEN Successfully Notification |
| 5. View State |  |

**Use Case:** Enter Result

**Scenario:** Successful change to the State of the Result POSITIVE.

|  |  |
| --- | --- |
| **Test Staff** | **Test Centre tracking System** |
| 1.Enter Result | 2.Check Result/State |
|  | 3.If the Result == POSITVIE change State to RED no matter what state it is in. |
|  | 4. State changed to RED Successfully Notification |
| 5. View State |  |

**Use Case:** Enter Result

**Scenario:** Undecided Result should remain as it is

|  |  |
| --- | --- |
| **Test Staff** | **Test Centre tracking System** |
| 1.Enter Result | 2.Check Result/State |
|  | 3. if the Result == UNDECIDED, State should remain as it is |
|  | 4. State Unchanged Notification |
| 5. view State (Unchanged) |  |

**Derive Test from Scenario**

**Test Data:**

* Input:
  + Enter Result: Result; NEGATIVE, POSITIVE, UNDECIDED
  + State: RED, GREEN
* Stored Data
  + On Staff Apps: View State change, results Stored.
  + On Staff Tracking System:
* Output:
  + State changed to the correct criteria
  + POSITIVE: RED
  + NEGATIVE: GREEN

**Test Process:**

1. Set up Test Context
2. In staff App: 3 choices Negative, Positive or UNDECIDED only
3. Result Database: (a) To contain the staff Result entered with the States that has been changed. (b) The Result state should meet the criteria given in the Test Data section. POSITIVE: RED, NEGATIVE: GREEN.
4. Enter Results:
5. Expected: NEGATIVE, POSTIVE, UNDECIDED
6. Check: if the Result matches the criteria
7. Change State Request
8. Expected output: Positive to red and negative to green, undecided should remain as it is.
9. Check: if the state matches the criteria given.
10. View State in the app
11. Expected output: The State is changed when the result is given. Undecided should keep the state as it is.