**Test Case 2.1 (B) - Search for Employee**

1. **Test Case ID**: 2.1
2. **Test Case Description**: Verify that the employee search functionality correctly retrieves an employee's record when searched by last name in combination with either SSN or employee ID.
3. **Test Inputs**: Various combination of input will be used to test various scenarios. The parameters used when executing test case are:
   * Employee’s last name, i.e. “Doe”
   * Employee ID, i.e. “EMP001”
   * Employee’s SSN, i.e. “123-45-6789”
4. **Expected Results**:
   * When the last name and SSN are used as inputs, the system returns the correct employee record matching both.
   * When the last name and Employee ID are used as inputs, the system returns the correct employee record matching both.
5. **Initialization**:
   * Ensure the testing environment is set up with the employee management application running.
   * Verify that the database is populated with test data, including an employee with the last name "Doe", SSN "123-45-6789", and Employee ID "EMP001".
6. **Dependency**:
   * The system must be able to connect to the database without issues.
   * The user conducting the test must have the necessary permissions to access the search functionality.
7. **Test Steps**:

**Step 1**: Log in to the system.

**Step 2**: Navigate to the employee search interface

**Step 3**: Enter last name of known employee “Doe” and SSN “123-45-6789” in the respective fields and initiate search.

**Step 4**: Clear all fields and repeat with last name “Doe” and Employee ID “EMP001” into respective fields.

1. **Postconditions**: System remains operational and no changes were made to the employee’s records as a result of the operation.
2. **Test Pass/Fail Criteria**: The test case passes if all steps execute successfully and the the data returned by the system matches the expected data for the employee record. Otherwise it fails.
3. **Tear Down**: Log out of system. Close any open connections to DB.

**Actual Result (Example)**:

|  |  |  |
| --- | --- | --- |
| Step 1: |  | Successfully logged into the system. |
| Step 2: |  | Searched for the employee by last name and SSN and successfully found the employee “Doe” with SSN “123-45-6789” |
| Step 3: |  | Searched for the same employee by last name but using employee ID instead and successfully found the employee “Doe” with Employee ID "EMP001" |

**Test Case 2.2 (B) - Search for Non-Existent Employee**

1. **Test Case ID**: 2.2
2. **Test Case Description**: Ensure that the employee search functionality does not retrieve any record when searched using details of a non-existent employee.
3. **Test Inputs**: Various combination of input will be used to test various scenarios. The parameters used when executing test case are:
   * Employee’s last name, i.e. “NonExistentLastName”
   * Employee ID, i.e. “NONEMP999”
   * Employee’s SSN, i.e. “999-99-9999”
4. **Expected Results**:
   * When a last name and SSN that do not match any employee record are used as inputs, the system should not return any record.
   * When a last name and Employee ID that do not match any employee record are used as inputs, the system should not return any record
5. **Initialization**:
   * Ensure the testing environment is set up with the employee management application running.
   * Confirm that there are no employees in the database with the last name “NonExistentLastName” and the provided SSN and Employee ID.
6. **Dependency**:
   * The system must be able to connect to the database without issues.
   * The user conducting the test must have the necessary permissions to access the search functionality.
7. **Test Steps**:

**Step 1**: Log in to the system.

**Step 2**: Navigate to the employee search interface

**Step 3**: Confirm that no employee currently exists with your search criteria

**Step 4**: Enter last name “NonExistentLastName” and SSN “999-99-9999” in the respective fields and initiate search.

**Step 5**: Clear all fields and repeat with last name “NonExistentLastName” and Employee ID “NONEMP999” into respective fields.

1. **Postconditions**: System remains operational and no new records were created as a result of the search operation.
2. **Test Pass/Fail Criteria**: The test case passes if the system does not return any employee records for the non-existent employee data. The test fails if any records are returned.
3. **Tear Down**: Log out of system. Close any open connections to DB.

**Actual Result (Example)**:

|  |  |  |
| --- | --- | --- |
| Step 1: |  | Successfully logged into the system. |
| Step 2: |  | No employee found for last name “NonExistentLastName” and SSN “999-99-9999”. |
| Step 3: |  | No employee found for last name “NonExistentLastName” and Employee ID “NONEMP999” |