**Login\_Page Validation:**

**Test Case 1: Valid Login**

* **Test Case ID**: TC\_LOGIN\_001
* **Title**: Valid login with correct Student ID and Password
* **Preconditions**: Application is open and on login screen
* **Test Steps**:
  1. Enter 221234 in the Student ID field
  2. Enter Pass123 in the Password field
  3. Click the "Login" button
* **Expected Result**: User is successfully logged in and redirected to the dashboard
* **Status**: Pass

**Test Case 2: Invalid Student ID Format**

* **Test Case ID**: TC\_LOGIN\_002
* **Title**: Login fails when Student ID does not start with 22
* **Preconditions**: Application is open and on login screen
* **Test Steps**:
  1. Enter 211234 in the Student ID field
  2. Enter Pass123 in the Password field
  3. Click the "Login" button
* **Expected Result**: Error message shown: "Student ID must start with 22"
* **Status**: Pass

**Test Case 3: Invalid Password Format**

* **Test Case ID**: TC\_LOGIN\_003
* **Title**: Login fails with password not matching regex
* **Preconditions**: Application is open and on login screen
* **Test Steps**:
  1. Enter 221234 in the Student ID field
  2. Enter abc in the Password field
  3. Click the "Login" button
* **Expected Result**: Error message shown: "Password must be at least 6 characters and include letters and digits"
* **Status**: Fail

**Test Case 4: Empty Fields**

* **Test Case ID**: TC\_LOGIN\_004
* **Title**: Login fails with empty Student ID and/or Password
* **Preconditions**: Application is open and on login screen
* **Test Steps**:
  1. Leave Student ID and Password fields empty
  2. Click the "Login" button
* **Expected Result**: Error message shown: "Fields cannot be empty"
* **Status**: Pass

Registertion\_page  
  
**Test Case 1: Valid Registration**

* **Test Case ID**: TC\_REG\_001
* **Title**: Successful registration with valid inputs
* **Preconditions**: Registration form is open
* **Test Steps**:
  1. Enter 2 in Student Level
  2. Enter 221234 in Student ID
  3. Enter Ali Hassan in Student Name
  4. Enter Pass123 in Password
  5. Enter Pass123 in Confirm Password
* **Expected Result**: Registration successful, user redirected or confirmation shown
* **Status**: Pass

**Test Case 2: Invalid Student Level**

* **Test Case ID**: TC\_REG\_002
* **Title**: Registration fails with invalid student level
* **Test Steps**:
  1. Enter 6 or abc in Student Level
* **Expected Result**: Error shown: “Student level must be 1–5”

**Test Case 3: Invalid Student ID**

* **Test Case ID**: TC\_REG\_003
* **Title**: Registration fails when Student ID doesn’t start with 22
* **Test Steps**:
  1. Enter 201234 in Student ID
* **Expected Result**: Error: “Student ID must start with 22”

**Test Case 4: Empty Student Name**

* **Test Case ID**: TC\_REG\_004
* **Title**: Registration fails when student name is empty
* **Test Steps**:
  1. Leave name blank
* **Expected Result**: Error: “Student name cannot be empty”

**Test Case 5: Invalid Password Format**

* **Test Case ID**: TC\_REG\_005
* **Title**: Registration fails when password doesn’t match regex
* **Test Steps**:
  1. Enter abc in Password
* **Expected Result**: Error: “Password must be at least 6 characters and include a number”

**Test Case 6: Confirm Password Mismatch**

* **Test Case ID**: TC\_REG\_006
* **Title**: Registration fails when confirm password doesn’t match
* **Test Steps**:
  1. Enter Pass123 in Password
  2. Enter Pass124 in Confirm Password
* **Expected Result**: Error: “Passwords do not match”

Updata\_Info\_Page  
  
  
**Test Case 1: Successful Password Update**

* **Test Case ID**: TC\_UPDATE\_001
* **Title**: Update password with valid inputs
* **Preconditions**: Student exists, old password is correct
* **Test Steps**:
  1. Enter valid Student ID: 221234
  2. Enter correct Old Password: Pass123
  3. Enter New Password: NewPass123
  4. Enter Confirm New Password: NewPass123
  5. Click "Update"
* **Expected Result**: Password updated successfully message appears
* **Status**: Pass

**Test Case 2: Invalid Student ID**

* **Test Case ID**: TC\_UPDATE\_002
* **Title**: Student ID does not start with 22
* **Test Steps**:
  1. Enter Student ID: 211234
  2. Fill other fields correctly
* **Expected Result**: Error: “Student ID must start with 22”

**Test Case 3: Incorrect Old Password**

* **Test Case ID**: TC\_UPDATE\_003
* **Title**: Entering wrong old password
* **Test Steps**:
  1. Enter valid Student ID
  2. Enter incorrect Old Password
  3. Fill valid New Password and Confirm Password
* **Expected Result**: Error: “Old password is incorrect”

**Test Case 4: New Password Fails Validation**

* **Test Case ID**: TC\_UPDATE\_004
* **Title**: New password too short or lacks digits/letters
* **Test Steps**:
  1. Enter valid Student ID and Old Password
  2. Enter New Password: abc
  3. Enter Confirm New Password: abc
* **Expected Result**: Error: “Password must be at least 6 characters and include letters and digits”

**Test Case 5: Confirm Password Mismatch**

* **Test Case ID**: TC\_UPDATE\_005
* **Title**: Confirm New Password does not match New Password
* **Test Steps**:
  1. Enter valid Student ID and Old Password
  2. Enter New Password: NewPass123
  3. Enter Confirm Password: NewPass124
* **Expected Result**: Error: “Passwords do not match”

**Test Case 6: Empty Fields**

* **Test Case ID**: TC\_UPDATE\_006
* **Title**: Leave one or more fields empty
* **Test Steps**:
  1. Leave Student ID or Old/New Passwords empty
* **Expected Result**: Error: “All fields are required”

Delete\_Student\_Page  
  
**Test Case 1: Successful Deletion**

* **Test Case ID**: TC\_DELETE\_001
* **Title**: Successfully delete student with valid ID
* **Preconditions**: Student exists in the system
* **Test Steps**:
  1. Enter Student ID: 221234
  2. Click "Delete"
  3. Confirm deletion when prompted
* **Expected Result**: Student is deleted, success message appears
* **Status**: Pass

**Test Case 2: Invalid Student ID Format**

* **Test Case ID**: TC\_DELETE\_002
* **Title**: Student ID does not start with 22
* **Test Steps**:
  1. Enter Student ID: 201234
  2. Click "Delete"
* **Expected Result**: Error: “Invalid Student ID format”

**Test Case 3: Non-Existent Student ID**

* **Test Case ID**: TC\_DELETE\_003
* **Title**: Try deleting a student that doesn't exist
* **Test Steps**:
  1. Enter a Student ID that’s not in the system (e.g., 229999)
  2. Click "Delete"
* **Expected Result**: Error: “Student not found”

**Test Case 4: Empty Student ID Field**

* **Test Case ID**: TC\_DELETE\_004
* **Title**: Attempt deletion without entering ID
* **Test Steps**:
  1. Leave Student ID field empty
  2. Click "Delete"
* **Expected Result**: Error: “Please enter a Student ID”

**Test Case 5: Cancel Deletion**

* **Test Case ID**: TC\_DELETE\_005
* **Title**: User cancels deletion in confirmation dialog
* **Test Steps**:
  1. Enter valid Student ID
  2. Click "Delete"
  3. Click "Cancel" in the confirmation prompt
* **Expected Result**: No action taken, student remains in system