### **Test Plan for Login and Forgot Password Functionality**

#### **1. Objective**

Ensure that the login and forgot password features work as expected, allowing valid users to authenticate while preventing unauthorized access.

#### **2. Scope**

* **Login**: Verify correct authentication and error handling for invalid cases.
* **Forgot Password**: Ensure users can reset their password securely and receive the necessary email notifications.

#### **3. Test Cases**

##### **A. Login Functionality**

| **Test Case ID** | **Scenario** | **Test Steps** | **Expected Result** | **Status** |
| --- | --- | --- | --- | --- |
| **L-01** | Valid login credentials | 1. Enter valid email and password.  2. Click "Login" | User is redirected to the dashboard. | - |
| **L-02** | Incorrect password | 1. Enter valid email but incorrect password.  2. Click "Login" | Error message: "Invalid email or password." | - |
| **L-03** | Non-existent email | 1. Enter an unregistered email.  2. Click "Login" | Error message: "Invalid email or password." | - |
| **L-04** | Empty email and password | 1. Leave both fields blank.  2. Click "Login" | Error message: "Email and password are required." | - |
| **L-05** | Case sensitivity check | 1. Enter email with incorrect capitalization.  2. Click "Login" | Login fails (assuming email is case-sensitive). | - |

##### **B. Forgot Password Functionality**

| **Test Case ID** | **Scenario** | **Test Steps** | **Expected Result** | **Status** |
| --- | --- | --- | --- | --- |
| **FP-01** | Valid email | 1. Enter a registered email.  2. Click "Submit" | Password reset email is sent. | - |
| **FP-02** | Unregistered email | 1. Enter an unregistered email.  2. Click "Submit" | Error message: "Email not found." | - |
| **FP-03** | Empty email field | 1. Leave email field blank.  2. Click "Submit" | Error message: "Email is required." | - |
| **~~FP-04~~** | ~~Password reset link expiration~~ | ~~1. Request a password reset.~~  ~~2. Wait until the link expires.~~  ~~3. Click the link.~~ | ~~Error message: "This link has expired."~~ | ~~-~~ |
| **~~FP-05~~** | ~~Password reset with weak password~~ | ~~1. Open the reset link.~~  ~~2. Enter a weak password.~~  ~~3. Click "Submit"~~ | ~~Error message: "Password must meet security requirements."~~ | ~~-~~ |
| **~~FP-06~~** | ~~Password reset with mismatched passwords~~ | ~~1. Open the reset link.~~  ~~2. Enter different values for "New Password" and "Confirm Password."~~  ~~3. Click "Submit"~~ | ~~Error message: "Passwords do not match."~~ | ~~-~~ |

### **4. Assumptions**

* User accounts exist in the database.
* Password policies are enforced.

### **5. Pass/Fail Criteria**

* Tests must meet expected results.
* Any failure requires fixing before deployment.