Sample Test Plan - Forgot Password Feature

1. Objective

To verify that the 'Forgot Password' functionality allows users to reset their password securely and effectively through an email verification process.

2. Scope

Covers the frontend and backend flows triggered by the 'Forgot Password' action on the login page.

In Scope:

- Email input validation

- Link generation

- Token expiration

- Password reset form

Out of Scope:

- Third-party email delivery reliability

- Spam filtering behavior

3. Test Environment

Browser Compatibility: Chrome (latest), Firefox, Safari

API Base URL: https://api.acmeapp.com

Frontend Stack: React

Backend Stack: Node.js, PostgreSQL

Tools: Postman, Playwright (UI automation), Xray

4. Test Scenarios & Cases

TC-FP-001: Submit valid email - Reset email sent with unique link (Positive)

TC-FP-002: Submit unregistered email - "Email not found" error shown (Negative)

TC-FP-003: Submit blank form - "Required" error shown (Negative)

TC-FP-004: Submit invalid format - "Invalid email format" error (Negative)

TC-FP-005: Use expired reset link - "Link expired" message shown (Edge Case)

TC-FP-006: Reset with weak password - Password strength error (Validation)

TC-FP-007: Reset successfully - Confirmation shown -> Login works (Positive)

TC-FP-008: Reuse link after reset - "Link already used" message (Security)

5. Test Data

Valid user email: qauser@example.com

Invalid email: test@com

Expired token: Manually expired via database

Reset link format: https://acmeapp.com/reset-password?token=XYZ

6. Risks & Assumptions

- Users must have access to their email inbox

- Token expiration is set to 1 hour in all environments

- Link format will remain unchanged unless otherwise notified

7. Automation Plan

- Automate TC-FP-001, 002, 003, 004, 007 using Playwright

- Token expiration and link reuse (TC-FP-005/008) will be tested manually due to time-sensitive nature

8. Status Tracking

- Manual tests tracked in Xray under 'User Auth - Forgot Password'

- Automation runs flagged in smoke test suite and monitored in CI pipeline