

Test Strategy Document - EchoGPT Sign-Up Feature

1. Introduction

This Test Strategy Document outlines the quality assurance approach for testing the user sign-up feature of EchoGPT, an AI-driven productivity platform. The goal is to ensure the sign-up process is functional, secure, user-friendly, and meets both explicit and implicit requirements.

2. Requirements Analysis

The sign-up flow includes:

- Users can sign up via Email + OTP verification.
- Users can alternatively sign up using Google, Twitter, or GitHub.
- Users must provide their first name, last name, and email before receiving OTP.
- OTP is sent to the email and must be entered to complete verification.
- Users may opt in to receive updates about EchoGPT.

Assumptions:

- OTP will expire after a short period (e.g., 5 minutes).
- Invalid or expired OTP should display proper error messages.
- Social login will redirect to the respective OAuth providers and return user details.
- Duplicate email addresses should be flagged or prevented.
- System must comply with security standards for user data.

3. Scope of Testing

In Scope:

- Functional testing of email sign-up with OTP.
- Functional testing of third-party logins (Google, Twitter, GitHub).
- Negative and edge case testing.
- Usability, accessibility, and error message.
- Security considerations (basic checks).
- Cross-browser and device compatibility.

4. Test Objectives & Success Criteria

- Verify all sign-up methods (email OTP, Google, Twitter, GitHub) function correctly.
- Ensure proper error handling for incorrect inputs.
- Confirm OTP-based verification is secure and dependable.
- Test user experience, accessibility, and simplicity of signing up.
- Evaluate performance and compatibility across different browsers and devices.

5. Risk Assessment

High Risks: OTP delivery failures, OAuth integration failures, security vulnerabilities.

Medium Risks: Poor error handling, duplicate account creation.

Low Risks: Minor UI issues, inconsistent styling.

6. Testing Approaches

- Functional Testing: Validate all sign-up flows and error handling.
- Usability Testing: Assess clarity of error messages and the sign-up process.
- Security Testing: Validate OTP mechanism and input sanitization.
- Performance Testing: Measure response times for OTP delivery and sign-up completion.
- Compatibility Testing: Verify compatibility across browsers (Chrome, Firefox, Edge) and devices (desktop, mobile).

7. Test Environment

- Browsers: Chrome, Firefox, Edge
- Devices: Windows 11
- Network: Stable internet connection

8. Entry and Exit Criteria

Entry Criteria:

- Test environment set up.
- Requirements clarified.
- Test cases prepared and reviewed.

Exit Criteria:

- All planned test cases executed.
- Critical defects fixed or workarounds identified.
- Test summary report delivered.