

EchoGPT AI Web Application

1. Introduction

The purpose of this document is to define the **test strategy** for the EchoGPT web application. The focus is on **manual testing** of authentication (email + OTP), chat functionality, and overall user experience.

2. Scope

- Functional Testing (Authentication, Chat, Conversation history)
- Non-Functional Testing (Usability, Security basics, Compatibility, Performance validation)

3. Test Objectives

- Validate that authentication works correctly using email + OTP.
- Ensure chat responses are handled correctly across various inputs.
- Verify the application's usability, accessibility, and compatibility on multiple devices/browsers.
- Identify and report defects with clear reproduction steps.

4. Test Approach

- **Manual Testing Approach**
 - Execute test cases based on functional and non-functional requirements.
 - Perform positive, negative, boundary, and exploratory testing.
 - Track results in a Test Execution Report.
 - Log all failures in a Bug Report Excel sheet.
- **Test Design Techniques**
 - **Equivalence Partitioning**
 - **Boundary Value Analysis**
 - **Error Guessing**

5. Test Deliverables

- Test Plan / Strategy Document (this document)
- Test Cases (Functional + Non-Functional, 50 cases)

- Test Execution Report (Pass/Fail summary)
- Bug Reports (Excel format, for defects found)

6. Test Environment

- **Browsers:** Chrome, Firefox, Edge, Safari
- **Devices:** Desktop (Windows), Mobile (Android, iOS)
- **Network Conditions:** Normal broadband, 3G (slow network)
- **Test Data:** Valid/invalid emails, OTPs, edge cases