

1. High-Level Overview of Findings

The **sign-up feature** of EchoGPT was tested thoroughly to evaluate its functionality, usability, and reliability. Testing was carried out on both **positive and negative flows**, covering input validation, OTP verification, and navigation.

Total Test Cases Designed: 28

Total Test Cases Executed: 28

Passed: 20

Failed: 8 (bugs reported)

Key Findings:

- **Critical Defect:** Wrong 6-digit OTP redirects to **home page without login** instead of showing an error message.
- **Major Defects:**
 - First Name and Last Name fields accept only spaces as valid input.
 - First Name and Last Name accept numeric values (e.g., "11").
- **Minor Defects:**
 - OTP emails sometimes land in spam folder.
 - No proper error messages for some invalid inputs.

Despite these issues, the **core sign-up flow (with valid data and OTP)** works correctly.

2. Quality Assessment of the Sign-Up Feature

Functionality: Partially meets expectations. Positive scenarios pass, but several validation gaps exist.

Usability: Simple and clear, though error messages can be improved for better user experience.

Security: Basic checks present, but improper handling of invalid OTP raises a security risk.

Performance: No noticeable lag in response times during testing.

Compatibility: Works across tested browsers (Chrome, Firefox, Edge).

Overall Quality Rating: Medium – requires fixes before production readiness.

3. Risk Assessment and Recommendations

Risk	Severity	Impact	Recommendation
Invalid OTP leads to home page without login	High	Security risk unauthorized access	Fix OTP validation and enforce proper error handling
Names accept spaces/numeric	High	Data integrity issue	Enforce input validation (alphabet-only checks)
OTP emails in spam folder	Medium	User confusion, signup delays	Improve email configuration
Inconsistent error messages	Medium	Poor user experience	Standardize and align all validation messages

4. Next Steps for the QA Process

1. **Bug Fixes & Retesting:** Critical and major defects must be fixed before release. Retest failed cases.
2. **Regression Testing:** Re-run full test suite to ensure no new issues are introduced.
3. **Automation Implementation:** Automate positive/negative flows for faster regression (Selenium + Pytest).
4. **Extended Testing:**
 - Security testing (SQL injection, XSS attempts on input fields).
 - Cross-device testing on mobile browsers.
 - Accessibility testing (keyboard navigation, screen readers).
5. **Sign-Off Criteria:** All critical and high-priority bugs resolved; >95% test cases passing.