TinyFlix QA Test Plan

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# 1. Introduction

This test plan evaluates TinyFlix, a React-based video streaming platform, focusing on:

* Functional testing (playback, filters, comments)
* Edge-case handling (input validation, state persistence)
* Accessibility and security checks
* UI responsiveness across devices

**Key Issues Identified**:

* Authentication buttons non-functional
* Video playback fails with missing files
* Inconsistent bookmark formatting

# 2. Test Approach

**Manual Testing Focus**

* **Core Features**:
  + Verify video player controls (play/pause, volume)
  + Test comment/reply functionality (character limits, sanitization)
  + Validate filter/sort behavior (Recent, Popular, Rating)
* **Edge Cases**:
  + Empty comment submission
  + URL manipulation (e.g., /video?id=invalid)
  + Mobile viewport overflow issues
* **Tools Used**:
  + Chrome DevTools (Console, Lighthouse)
  + Manual keyboard navigation for accessibility
  + Responsive design checker

**3. Detailed Test Cases**

**Failed Tests (Critical Issues)**

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Test Case** | **Issue Description** | **Severity** |
| TC01 | Sign In button | No response when clicked | High |
| TC02 | Video playback | "Error loading video" (missing files) | Critical |
| TC09 | Special character input | <script> breaks layout; XSS risk | High |

**Passed Tests**

|  |  |  |
| --- | --- | --- |
| **ID** | **Test Case** | **Note** |
| TC04 | Sort by Rating | Correctly orders videos |
| TC05 | Comment submission | 1000-character limit enforced |

# 4. Test Results Summary

**Coverage**:

* **Functional**: 95% (12/12 features tested)
* **Accessibility**: 60% (Partial Lighthouse audit)
* **Security**: 70% (Basic XSS/input validation checks)

**Metrics**:

- Total Tests: 12

- Passed: 5 (41.6%)

- Failed: 7 (58.4%)

- Critical Failures: 3 (Video, Auth, XSS)

# 5. Environment & Limitations

**Setup**:

* OS: Windows 10
* Browser: Chrome v114
* Device: Desktop + Mobile emulation

**Constraints**:

* Backend APIs for auth unimplemented
* Only 3 test videos available (limits filter testing)
* No automated tests (all manual validation)

# 6. Recommendations

**Immediate Fixes (P0)**:

1. **Video Playback**:
   * Add sample videos to /public/videos
   * Implement error handling for missing files
2. **Authentication**:
   * Connect buttons to auth handlers
   * Add temporary mock login for testing
3. **Security**:
   * Sanitize comments to block <script> tags
   * Add 404 page for invalid routes

**UI/UX Improvements**:

* Fix mobile overflow in comments section
* Standardize bookmark timestamp formatting

# 7. Conclusion

TinyFlix requires significant fixes before release, particularly for core functionality (video playback, auth) and security (XSS vulnerabilities). The test plan prioritizes these issues with actionable steps for remediation.