**Functional Test Plan for Live Streaming Product**

**1. Introduction**

* Objective: Ensure that Company B’s API and its integration with Company A's platform function correctly across all platforms and devices.
* Scope: This test plan covers all major functionalities of the web application across different user roles and scenarios.

**2. Test Objectives**

* Validate the core functionalities of the APIs, Web Apps, and Native Apps.
* Ensure all user interfaces are functional and user-friendly.
* Verify data integrity and accuracy throughout the application.
* Test the application on different browsers, operating systems, devices, and platforms.
* Identify and log any defects or issues for resolution.

**3.1 Features to be Tested**

* Authentication: Verify that only authenticated users can post comments, photos, and reactions, while non-authenticated users can only view them.
* Post and Reaction Functionality: Test the ability to post comments, photos, and reactions.
* View Functionality: Ensure that non-authenticated users can view comments, photos, and reactions but cannot interact.
* Cross-Platform Compatibility: Test the functionality across all platforms (Desktop Web, Mobile Web, iOS Native, Android Native, FireTV, AndroidTV, Roku, Chromecast).

**3.2 Features Not to be Tested**

* Third-party integrations (beyond the scope of this test plan)
* Non-functional requirements like load testing, and security (handled separately)

**4.1 Test Environment**

* Browsers: Chrome, Firefox, Safari, Edge
* Operating Systems: Windows 10, macOS, Linux
* Devices: Desktop, Tablet, Mobile
* Platforms: FireTV, AndroidTV, Roku, Chromecast

**4.2 Test Data**

* Sample Users: Test with multiple user accounts (admin, authenticated user, unauthenticated user)
* Content Data: Use mock data for content creation and management tests.

**4.3 Entry Criteria**

* The application should be deployed to a staging environment.
* Test data should be available and configured.

**4.4 Exit Criteria**

* All planned test cases should be executed.
* Critical and high-severity defects should be resolved or have a workaround.
* Test results should be documented and reviewed.

**5. Test Cases**

* Authenticate as a user and post a comment/photo/reaction.
* Authenticate as a user and view posted content.
* View content as a non-authenticated user.

**6. Test Execution**

* Test Execution Timeline: [Start Date] - [End Date]
* Testers: [Names of team members responsible for testing]
* Defect Reporting: Defects will be logged in [Defect Management Tool] with priority and severity.

**7. Test Deliverables**

* Test cases in [Test Case Management Tool]
* Test execution results (pass/fail status)
* Defect logs with status and resolution details
* Final test report summarizing testing activities and results

**8. Risks and Mitigations**

* Risk: Browser compatibility issues on lesser-used browsers.
  + Mitigation: Prioritize testing on the most popular browsers and allocate extra time for compatibility fixes.
* Risk: Delays in test environment setup.
  + Mitigation: Coordinate with DevOps to ensure the environment is ready before the testing phase.

**9. Approval**

* Prepared by: [Your Name]
* Approved by: [Project Manager/Lead QA]