**Test Plan for YouTube**

#### **1. Test Plan Identifier**

* **TP-001**: YouTube Application Testing
* **Date**: November 14, 2024
* **Author**: Stephen Chitaranjan B

#### **2. Introduction**

The purpose of this test plan is to define the approach, scope, and objectives for the testing of the YouTube application. The primary focus is to verify the functionality, usability, performance, and security of the system based on the specified requirements. This document provides a structured approach to ensure that all critical aspects of the YouTube application are thoroughly tested and meet the required standards.

#### **3. Objectives**

* To verify that the core functionalities of YouTube, including video feed, search, subscriptions, and video playback, work as expected.
* To assess the usability and layout of the homepage, ensuring it provides a user-friendly and intuitive experience.
* To evaluate the performance of the application by verifying acceptable load times for the homepage.
* To validate the security features by ensuring proper error handling for invalid login attempts.
* To ensure that the application meets accessibility standards.

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#### **4. Test Items**

* **Video Feed**: Display of recommended and trending videos.
* **Search Functionality**: Ability to search for videos using specific terms.
* **Homepage Layout**: Review of the design and usability of the homepage.
* **Video Playback**: Verification of seamless video playback.
* **Subscription Management**: Display of subscribed channels and videos.
* **Notifications**: Display and functionality of notifications.
* **Security**: Secure login process and error handling for invalid logins.
* **Performance**: Load time for the homepage and videos.
* **Accessibility**: Availability and functionality of accessibility features.

#### **5. Test Environment**

**Platform**: Web-based application (Desktop)

**Browser**: Chrome, Firefox (latest stable versions)

**OS**: Windows 10

**Internet Connection**: Stable broadband connection (minimum 10 Mbps)

**Test Tools**: Selenium (for performance testing)

**Devices**: Desktop PCs, Laptops (Windows)

#### **6. Risks**

* **Environmental Issues**: Changes in the platform, operating systems, or browser updates may impact test execution.
* **Network Dependency**: Testing performance and video playback is highly dependent on the network quality.
* **Data Availability**: Some features, such as recommended videos, require a user’s viewing history, which may vary across test cases.
* **Test Data Accuracy**: The availability and correctness of test data (like video titles or user credentials) may affect test results.

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#### **7. Approval**

| **Name** | **Role** | **Date** |
| --- | --- | --- |
| John Doe | Test Manager | November 14th, 2024 |
| Michael Johnson | Development Lead | November 14th, 2024 |
| Stephen | QA Lead | November 14th, 2024 |
| Williams | Product Owner | November 14th, 2024 |