

TEST PLAN DOCUMENT

Testing Instagram (Web)

A Social Media Platform

Table of Contents

1. INTRODUCTION	2
Objective.....	2
Team Members	2
Business Rules.....	2
2. SCOPE.....	2
3. TEST STRATEGY.....	3
Approach	3
Test Design Techniques.....	3
4. TEST ENVIRONMENT	3
5. TEST PHASES.....	4
6. TEST DELIVERABLES	4
7. RISKS AND MITIGATION	4
8. APPROVAL	4

TEST PLAN	Testing Instagram (Web) – A Social Media Platform
-----------	---

This document outlines the Test Plan created for testing the core functionalities of web version of Instagram, a social media platform.

1. INTRODUCTION

Instagram is one of the most widely used social media platforms, allowing users to share photos, manage profiles, and connect with others. The purpose of this project is to apply software testing techniques in a practical scenario using both manual and automated testing. Instagram was chosen due to its real-world relevance, feature-rich interface, and suitability for applying various testing strategies.

Objective

The prime objective of this project is to confirm that the essential functions of the platform work as expected and are dependable for end users for web version of this application. This test plan’s purpose is to assess the accuracy, stability, and user-friendliness of the core system features.

Team Members

Members	Responsibilities
Test Lead	Project coordination, Create Test Plan, Review test design and selenium scripting, Review Final report
Test Designer/ Executor	Designing test cases and scenarios and executing tests
Test Executor	Running manual tests, creating defect reports
Automation Tester	Develop and maintain Selenium automation scripts, run automated tests, analyze results.
Automation Tester	Collaborate automation script development, and create final document

Business Rules

- A. Users can log in with valid credentials, with secure password handling and account lockout after multiple attempts.
- B. Users should be able to update their profile information with changes reflected immediately.
- C. Content creation allows photo uploads with captions, adhering to file size and format limits, sharing.
- D. The user search feature should return accurate results based on username, displaying profile information such as the username and profile picture.

2. SCOPE

The project will focus on testing the following core areas of the Instagram platform web version:

- A. **Login Functionality:** Testing the login process to ensure users can securely log in with valid credentials and handle incorrect attempts
- B. **Profile Management:** Verifying that users can edit and update their profile information, including the display name, bio, and profile picture.
- C. **Content Creation and Sharing:** Uploading images, editing captions, handling errors, etc.
- D. **User Search:** Testing the user search functionality to ensure users can accurately search by username and view relevant profile information (username, profile picture).

3. TEST STRATEGY

Approach

Black Box Testing

Testers will focus on validating the application's behavior based on its inputs and outputs without knowing the internal workings of the application. To ensure that core functionalities of Instagram's web version meet the specified requirements and function correctly, the testing approach will involve both **Functional Testing** and **Non-**

Functional Testing.

- A. **Functional Testing:** This will involve verifying that the functionalities meet the specified requirements and business logic.
- B. **Non-functional Testing:** Testing the response time of the login process and content upload process under various conditions (e.g., with large file uploads) and ensuring the system meets the user expectations for each module and feature, ensuring it's ready for release.

Test Design Techniques

- A. **Boundary Value Analysis (BVA):** To check edge cases like minimum/maximum values (e.g., bio length, caption character limits).
- B. **Usability Testing:** Ensuring that the interface is intuitive, and the user experience is smooth. This includes testing features like password masking and the appearance of profile updates.
- C. **Negative Testing:** Testing invalid inputs such as wrong login credentials, unsupported file formats, and special characters in usernames or bio.
- D. **Automation Testing:** Validate login functionality for correct and incorrect credentials, Verify profile management operations like viewing and navigating profiles. Viewing other users and posting notes.
- E. **Load/Stress Testing:** Testing Instagram's scalability by simulating heavy loads on the system (e.g., simultaneous login attempts or multiple content uploads) to ensure it performs under stress.

4. TEST ENVIRONMENT

A. **Device:** Lenovo Thinkbook 13s G3 ACN

B. **Web Browser:** Google Edge

C. **Tools Used:**

- Selenium WebDriver
- Python
- Jupyter Notebook
- WebDriver Manager
- Excel for test case and defect tracking

5. TEST PHASES

Testing will be carried out in the following phases:

PHASES	DEADLINE
Test Planning	March 24
Test Case Design	March 29
Automation Script Development	April 3
Test Execution	April 7
Defect Reporting	April 8
Test Closure	April 9

6. TEST DELIVERABLES

The following key deliverables will be provided throughout the testing project:

Test Plan Document	A comprehensive document outlining the testing objectives, strategy, scope, and team responsibilities.
Test Design	Detailed test cases and scenario for each feature across all modules.
Selenium Automation Script (Python)	Automated test scripts developed using Selenium in Python
Defect Log (Excel or Google Sheet)	Detailed logs for any defects found during testing
Test Summary Report	A final report summarizing the testing process

7. RISKS AND MITIGATION

Risks	Impact	Mitigation Plan
Broad application features	High	Limit testing to only web version of the application and selected core functionalities
Limited experience with Selenium	Medium	Use beginner-friendly tutorials and basic commands
Time constraints	Medium	Clear role assignments and time management
Network Latency	Low	Will be tested in performance scenarios.
Browser or OS compatibility issues	Low	Standardize test environment using edge & Windows.

8. APPROVAL

Role	Signature	Approval Date
Reviewer		
Team Leader		