Test Planning and Execution – Validity Checker Software (Expiry Date – Laptop) GROUP-5

1. Introduction (BY Prince Mishra)

This section introduces the software under test (SUT) and the primary objective of testing.

Product Name: Validity Checker Software
Test Object: Laptop
Objective: To test software that verifies whether a laptop is within its valid (non-expired) usage period based on expiry date (e.g., warranty or license validity).

2. Test Plan (BY Prince Mishra)

Scope:
Defines the boundaries of what will be tested in this phase.

- - Validity check for expiry dates of laptop warranty/license.
  - Inputs will include product name, manufacturing date, and expiry date.

Features to be tested:
Specifies individual software features to be tested.

- - Expiry date format validation: Ensuring the input date format is correct.
  - Expired vs. Non-expired logic: Verifying the correct output depending on date.
  - Edge case testing (expiry date = current date): Ensuring exact boundary cases work.
  - Incorrect date formats and inconsistencies: Catching errors when user inputs invalid or inconsistent dates.

Assumptions:
Conditions assumed to be true for the purpose of planning and testing.

- - Date format is standardized (e.g., DD-MM-YYYY).
  - Current date will be system date, used for comparison with expiry.

3. Test Design (By Usha)

Test design defines specific test cases and expected outcomes. Each case checks how the software behaves under certain input conditions.

Test Case ID	Test Scenario	Input Data	Expected Result	Status
TC01	Check for valid product	Expiry: 25-08-2025	Product is valid	Pass
TC02	Check for expired product	Expiry: 01-01-2023	Product has expired	Pass
TC03	Expiry date is today	Expiry: (Today)	Product is still valid	Pass
TC04	Invalid format input	Expiry: 2025/08/25	Show error: invalid format	Pass
TC05	Blank expiry field	Expiry: (Blank)	Prompt user to input date	Pass

4. Test Environment (By Suma)

Test environment describes the hardware and software setup used to execute test cases. This ensures tests are conducted under controlled and repeatable conditions.

- - OS: Windows 11 – Operating System used for running the software.
  - Software Under Test (SUT): Validity Checker.exe / Web Version – Application being tested.
  - Tools: MS Excel, Notepad – Utilities to record logs or results.
  - Database: Local JSON or SQL DB – Storage backend to fetch or validate data.

5. Execution Plan (By Deepak)

Execution plan defines how and when the tests will be carried out, including resources and duration.

- - Testing Method: Manual Testing – Testers execute test cases without automation tools.
  - Duration: 2 Days – Time allocated for testing.
  - Testers: 2 – Number of people performing the tests.
  - Environment Setup: 1 Day – Time for preparing and installing required tools.

6. Bug Tracking (By Vikas)

Bug tracking involves logging and monitoring software defects found during testing.

Medium: Excel or Bugzilla – Tools used to document and manage defects.

Sample Entry:
Details of a potential bug found during testing.

- - Bug ID: BUG001 – Unique identifier for each bug.
  - Description: Accepts wrong date format – Explanation of what went wrong.
  - Severity: Medium – Level of impact on functionality.
  - Status: Open – Current state of the bug (open, resolved, closed).

7. Deliverables (By Jyotisman Kirti Prakash)

Deliverables are the testing artifacts provided at the end of the test cycle.

- - Test Plan Document – Overview of strategy and approach.
  - Test Case Sheet – Detailed test scenarios and results.
  - Defect Log – List of all issues discovered.
  - Test Summary Report – Overall findings and conclusions.

8. Summary (By Jyotisman Kirti Prakash)

This document outlines the approach for testing a validity checking software that determines product validity based on expiry date. Each section describes the process from planning to execution to ensure reliable software behavior.