Test Plan Document for Tracking the Orders

We will incorporate STLC and Test planning both for testing of our feature and requirement. We will follow below steps:

1. Analyse the product(Requirement Analysis)
2. Design the Test Strategy
   1. Define Scope of Testing
   2. Identify Testing Type
   3. Test Planning
   4. Test case development
3. Define the Test Objectives
4. Define Test Criteria
5. Resource Planning
6. Plan Test Environment
7. Schedule and Estimation
8. Determine Test Deliverables

**Analyse the product (Requirement Analysis)**

We will refer the User-story for understanding the functionality and use case of the feature. For clarifications, point of contact would be Product-manager or project manager.

We will analyse the below criteria:

* End user of our product.
* Functionality of the product.

**Design the Test Strategy**

**Define Scope of Testing:**

The components to be tested (hardware and software) are defined as in scope.

* Precise customer requirement
* Project Budget
* Product Specification
* Skills & talent of Test team
* Identify Testing Type:
  + **Functional Testing:**
    - UNIT Testing: Testing the smallest testable part of the application to verify if it’s functioning as intended.
    - Integration Testing: Verifying communication between modules to ensure their functioning. e.g.: integration of backend GPS service with the application to track the location
    - System Testing: Testing the complete software/feature before it is released.
    - User Acceptance Testing : Testing the application with actual set of users to ensure real world usage.
  + **Non Functional Testing:**
    - Performance Testing:
      * Stress: Determine the breakpoint of the application.
      * Load: Determine Performance of application when load is within limits.
    - Security Testing: It should not upload any video whose name contain html tags or special character.
    - UI Testing: Font size, Text Colour, Alignment of text.
    - Usability Testing: Getting the application used by a naive user to check the ease of use
    - Compatibility Testing: Testing with different version of Androids and Models
    - Localization Testing : Testing the Application with different locales of the device.

**Test Planning:**

* Preparation of test plan/strategy document for various types of testing
* Test tool selection: Selenium for automation, JMETER for Performance, Postman for API
* Test effort estimation 5-7 days
* Resource planning and determining roles and responsibilities.
* Training requirement.

**Test case development:**

Test-cases to be created by QA Team.

Attaching the Test cases.

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**Define the Test Objectives**

Test Objective is the overall goal and achievement of the test execution. The objective of the testing is finding as many software defects as possible and ensure that the software under test is bug free before release.

* Order Assignment
* Location Tracking
* API testing to check the data flow

**Define Test Criteria**

**Suspension Criteria:** Specify the critical suspension criteria for a test. If the suspension criteria are met during testing, the active test cycle will be suspended until the criteria is resolved. We can define 35% in our case. So if 35% of Test-cases are failed then we will suspend the user-story.

**Exit Criteria:** It specifies the criteria that denote a successful completion of a test phase. The exit criteria are the targeted results of the test and are necessary before proceeding to the next phase of development. So 95% of all critical and blocker test cases must pass.

**Resource Planning**

**QA Resource:**

* QA Manager: Manage the whole project. Define project directions. Acquire appropriate resources
* QA: Identifying and describing appropriate test techniques/tools/automation architecture Verify and assess the Test Approach. Execute the tests, Log results, Report the defects.
* Test Administrator (we will represent one of QA as Test Admin for the feature or module): Builds up and ensures Test Environment and assets are managed and maintained. Support Tester to use the test environment for test execution.

**Plan Test Environment**

Once we are allocated with QA and system resource. We will integrate and verify system resources are functional and verify below

Application server:

* Minimum HDD requirement:300MB-500MB
* Minimum RAM Requirement:1GB
* Minimum Core Requirement:2Core

Database Server:

* Database server: SQLite

**Schedule and Estimation**

|  |  |  |
| --- | --- | --- |
| **Task** | **Members** | **Estimate effort(man hour)** |
| Create the test specification | QA Manager | 5 |
| Perform Test Execution | QA, QA Administrator | 90 |
| Test Report | QA | 3 |
| Total Time | | 98 |

**Determine Test Deliverables**

Test deliverables to be provided before testing phase:

* Test plans document.
* Test cases documents
* Test Design specifications.

Test deliverables are provided during the testing:

* Automation Test Scripts.
* Test Data
* Test Traceability Matrix
* Error logs and execution logs.

Test deliverables are provided after the testing cycles is over:

* Test Results/reports
* Defect Report
* Installation/ Test procedures guidelines