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:**
    - API Testing: API for upload, record, play the video are working.
    - UI Testing: Testing in different versions of Anroid.
    - Usability Testing: Taking the help of some people outside the product and asking to perform different activity.so that he doesn’t have any problem in identifying any links, buttons or pages.
    - Compatibility Testing: Testing with different version of compatible browsers versions
    - Integration Testing: Verifying smaller modules so that it thoroughly work as a feature. ex: video upload and video play
    - System Testing: testing the complete software/feature before it is send from QA environment.
  + **Non Functional Testing:**
    - Performance Testing:
      * Stress: maximum length video we can upload or record and play it.
      * Load: Simultaneously how many user can upload or record the video and video is saved.
    - Security Testing: It should not upload any video whose name contain html tags or special character.
    - Recovery Testing: system should operational/functional after any issue.

**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.

Attached 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.

We will break the feature into as small units as possible so that we can test each unit separately and more deeply:

1. Video recording
2. Video uploading
3. Formats supported
4. Video saving
5. Video playing

**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 are 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**

**System Resource:**

* Server: Install the web application under test.This includes a separate web server, database server, and application server
* Test tool: Selenium, Burp-suite, JMETER, Postman
* Computer: The PC which users often use to connect the web server
* Network: You need a Network include LAN and Internet to simulate the real business and user environment.

**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.
* Developer in Test: Implement the test cases, test program, test suite etc.
* 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:50GB
* Minimum RAM Requirement:2GB
* Minimum Core Requirement:2Core

Database Server:

* Database server: MSSQL/Oracle/MYSQL
* Minimum HDD requirement:100GB
* Minimum RAM Requirement:4GB
* Minimum Core Requirement:4core

Application Server:

* Linux/apache
* Jdk 1.xv

**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