Test Plan for Mobile Apps

1. UNIT TESTING:

Objective: The main objective of unit testing is to verify whether every unit operates as intended. A function, procedure, method, or even the entire module can be considered a separate unit. Unit testing can be conducted manually, but automated testing is a more common practice.

2. ENTRY CRITERIA:

a) The development phase has been finished.
b) Requirements have been defined and approved.
c) Test design and tests plan have been created.
d) The test environment has been set up.
e) All necessary resources are available.

3. LOGGING TEST AND REPORTING:

a) Each detected issue should be properly reported using special tools and applications.

4. SYSTEM TESTING:

Objective: System testing is generally conducted after Unit Testing. The objective of System Testing is to evaluate compliance of an integrated application with its requirements.

Testing Procedure:

a) Choose Tools for Test case (Click Up, Excel etc.)
b) Test Case Preparation
c) Test case reviewed
d) Bug Reporting and Tracking

Types of System testing need to perform:

A) Performance testing**:** Performing testing is conducted to detect issues related to

- Memory consumption
- Power utilization
- Network connectivity

- Operating in the background
- Switching between applications
- Memory leakage

B) **Interrupt Testing:** This testing type examines how an application reacts to interruption and resumes to its previous state. There are numerous reasons that can potentially interrupt the operation of an app, such as getting a phone call, messages, notifications, battery low, etc.

C) **Usability Testing:** Usability testing is performed to check whether the application is easy to use and understand for the end-user.

D) **Installation and Launch testing:** Installation testing aims to detect whether there are any issues during the installation, uninstallation, and updating process. Once the application has been installed, a QA engineer also checks the launching process.

E) **Functional Testing:** All the functions and features of the application are tested to verify whether they operate according to the specification.

F) **Security testing:** Security testing is conducted to find the application vulnerabilities and prevent data breaches.

G) **Regression testing:** Regression testing is a re-execution of tests that had been done before the code changes. Its purpose is to verify whether a new functionality has affected the existing one.

H) **Compatibility Testing:** Test Application in different Resolutions Screen sizes

5. TEST REPORT:

a) Name and overview of an application
b) Testing hardware and software environment.
c) The number of test cases executed/passed/failed

6. EXIT CRITERIA:

a) Tests cases are executed
b) The rate of tests cases passed is satisfactory
c) Failed test cases are not related to crucial functionality
d) Tests results have been accepted
e) Critical defects have been fixed.

7. RISK:

a) Availability of devices
b) New features and modification which have not been planned in advance
c) Changes in requirements
d) Delays in schedule(Build)

8. ASSUMPTIONS:

a) Each release is accompanied by a note with information about implemented features and their impact on the system
b) All blocker bugs receive the high priority status
c) All the bugs found are fixed before the next software release
d) All documents are up-to-date and delivered to the testing team in time
e) All necessary equipment and tools are provided and ready for testing
f) The test schedule is reviewed in case there are any obstacles for testing

9. TEST MATRICES:

a) Requirement coverage
b) Test cases coverage
c) Number of tests executed
d) Number of defects found (taking into consideration their priorities and severities)
e) Tests design effort
f) Total test effort

10. DELIVERABLES: (If Asked to deliver)

a) Test plan
b) Test cases documents
c) Test strategy
d) Test results
e) Test summary report