**Test Plan**

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**Project: Ultra Data Saving Mode**

1. **Introduction**
   * **Overview**: The primary purpose of this test plan is the testing of “**Ultra Data Saving Mode**” feature for Samsung Android A7 model.
   * **Scope of Testing**: The plan is to test all the features listed in the product feature list includes verification of all core functionalities. Example, feature enable/disable, able to add apps when feature is on, Savings report should be generated. Functional testing will cover **System testing, Regression testing, Integration Testing** along with **User Acceptance testing** to ensure it meets their needs and expectations. Additionally, **Smoke testing** will be performed to check that other applications are not impacted with this feature. For non-functional testing will perform **Performance** and **Usability** testing.
   * **Out Of Scope Testing**: For the current testing phase, this feature is only for Samsung Android A7 model. Additionally, this is exclusively supported on **Version 14**, and compatibility with other versions is not included currently.
   * **Team**: Developers, Testers, Project Manager, and Stakeholders.
2. **Objective**
   * This feature will optimize mobile data usage by allowing only selected applications to consume mobile data in the background. Based on this user’s are saving mobile data which will save their money. This can be tracked through **Savings Report,** which users can generate using the feature available within the application. Additionally, this feature is also expected to enhance battery life by limiting background data.
3. **Test Strategy**
   * **Type of Testing:** Functional testing (System, Regression, Integration, Smoke and User Acceptance testing), Performance testing, Automation testing (with the help of selenium tool)
4. **Test Criteria**
   * **Entry Criteria**:
     1. Code should be deployed by April 20 and 10 hardware devices available.
     2. Test documentation is created.
     3. Test data is available
     4. Test environment is ready
     5. Test cases are complete, reviewed and approved.
     6. Requirements are finalized
   * **Exit Criteria**:
     1. All bugs in Jira are fixed along with blocker and critical severity defects.
     2. 100% test cases are executed
     3. All remaining defects are either cancelled or documented as Change Requests for a future release
     4. Planned deliverables are ready.
     5. Project is approved by stakeholders and project manager.
5. **Schedule**

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| **Testing Type** | **Timeline** | **Resources** | **No. of Test Cases** |
| **Integration** | Apr 21 – Apr 24 | 2 Testers | 960 |
| **Smoke** | Apr 25 – Apr 26 | 1 Tester with Selenium | 320 |
| **System** | Apr 28 – May 5 | 2 Testers | 1600 |
| **Regression** | May 6 – May 8 | 2 Testers | 850 |
| **User Acceptance** | May 9 – May 13 | 1 Tester with Selenium | 1450 |
| **Performance** | May 14 – May 19 | 2 Testers | 1100 |
| **Usability** | May 20 – May 21 | 1 Tester | 250 |

1. **Test Environment**
   * **Hardware:** Samsung Galaxy A7, 6-inch Full HD+ (1080x2220 pixels).
   * **Software:** Android OS version 14, no older or newer version supported.
   * **Emulators**
2. **Roles and Responsibilities**
   * Project Manager and Stakeholders will sign off the feature after development and testing.
   * QA Testers will test the Functional testing, Performance and Usability testing and defect reporting.
   * Developers helps with Bug triage, and environment setup support.
3. **Test Deliverables**
   * Test Metrics and Defect Metrics Report
   * Daily Status Report
   * Weekly Status Report
   * Final (Project closure) Test status report.
4. **Test Cases**
   * <https://github.com/Komaldewan11/Komal_Dewan1108/Testcases> (dummy URL)
   * **Test Case Id: 0001**
   * Title: Ultra Data Saving Mode enable option
   * Steps: On Idle screen🡪 Go to mobile Settings🡪 Tap on Connections🡪 Scroll down to the bottom🡪 then tap on Ultra data saving mode🡪 Select Enable option.
   * Expected Result: Ultra data saving mode should enable.
   * **Test Case Id: 0002**
   * Title: Add apps in Ultra Data Saving Mode
   * Steps: On Idle screen🡪 Go to mobile Settings🡪 Tap on Connections🡪 Scroll down to the bottom🡪 then tap on Ultra data saving mode🡪 Select Enable option🡪 then Tap on ‘+’ sign to add app🡪 Select top app to add.
   * Expected Result: Selected app should display in Ultra Data Saving mode screen.
5. **Risks and Mitigations**
   * Risk 1: Software delivery later than April 20 will impact QA timelines.
     1. Mitigation: We will setup status meeting with developers to ensure software readiness. If software delivery is delayed, QA will re-prioritize other project to complete the testing timely
   * Risk 2: Lack of sufficient mobile devices for testing.
     1. Mitigation: QA will initiate the procurement for 5 additional devices by April 18 to make sure testing will not be impacted if some devices have hardware problems. In the meantime, QA will setup emulators as a backup solution. However, it is important to note that emulator will slower testing processes and due to this reason, this option is not reliable compared to physical devices.
   * Risk 3: Lack of QA testers
     1. Mitigation: QA will arrange testers from other projects to support testing of this feature.
6. **Tools and Techniques**
   * Jira, Selenium for automation testing, and manual testing.
7. **Reporting and Communication**
   * All the documents will be shared through GitHub to Project Manager, or Stakeholders and bugs will be reported in Jira.
   * QA testers will share the deliverables with Project Manager and Stakeholders daily and weekly basis.