Software Requirements Specification

for

Battery Optimization Software System

Version 1.0 approved

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Revision History

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| --- | --- | --- | --- |
| **Name** | **Date** | **Reason For Changes** | **Version** |
| Josh Treff | 10/07/2020 | Initial Release | 1.0 |
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# Introduction

## Purpose

This Software Requirements Specification, Version 1.0, defines the requirements for Battery Optimization Software System. The Battery Optimization Software System is an application that allows users to monitor the battery usage by various applications, either running or in the background.

## Document Conventions

From here on, Software Requirements Specification and Battery Optimization Software System will be referred to as SRS and BOSS, respectively.

## Intended Audience and Reading Suggestions

This SRS is intended for use by developers, project managers, marketing staff, users, testers, and documentation writers. The following sections address the SRS Description and Requirements (functional, non-functional, and other). It is suggested that readers begin with the Overview, section 1, and proceed through sections 2 and 3 as required.

## Product Scope

BOSS is an application, which allows its user to monitor battery usage by different applications either active or running in the background. The goal of BOSS is to provide an easy to use way for the user to monitor, control, and optimize battery usage to maximize its life.

## References

Not applicable

# Overall Description

## Product Users

BOSS is compatible with Android users.

## Operating Environment

Cellular devices with the Android operating system will support BOSS

## Assumptions and Dependencies

Not applicable

# Functional Requirements

BOSS – 001: The software shall individually monitor battery consumption of all applications

BOSS – 002: The software shall notify users when a background application is consuming battery

BOSS – 003: The software shall calculate remaining battery life

BOSS – 004: The software shall generate a GUI displaying total battery consumption

BOSS – 005: The software shall generate a list of all applications consuming battery

BOSS – 006: The list of applications shall be sortable alphabetically and by usage level (ascending/descending)

BOSS – 008: The software shall all users to create different battery profiles

BOSS – 009: The software shall provide detailed information for each running application

BOSS – 010: The software shall prompt users to close background applications consuming battery

BOSS – 010: The software shall be compatible with Android operating system

# Nonfunctional Requirements

BOSS – 011: The software shall collect battery consumption data every 5 seconds

BOSS – 012: The software shall consume <1% battery when operating

BOSS – 013: The software shall store 7 days of battery consumptions data

BOSS – 014: The software shall calculate remaining battery life +/- 5 minutes

BOSS – 015: The software shall monitor up to 100 applications

# Other Requirements

*BOSS – 016: The software shall not share any data external to the device it operates on*