**Software Requirement Specification**

**Planet Data App**

**Version:** 0.1

**Version Summary:** First Version

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# 1. Introduction

## 1.1 Document purpose

This document describes the software requirements for an android application called “Planet Data App”.

## 1.2 Document Conventions

**Android** – Operating system for mobile devices, developed and maintained by Google. For the purpose of minimizing repeating **Android** means **Android** version 8.0 or newer, if not specified otherwise.

## 1.3 Document Targets

This document is targeted towards me (Filip Soukal) and Ing. Pavel Švec, my teacher and anyone, who wants to read or continue this project.

# 2. Project Description

## 2.1 Project Product

The final product from this project will be an Application with information about space bodies in our solar system. The app will get the space bodies info from an API service called “The Solar System OpenData”.

## 2.2 operating environment

The app will run on a mobile operating system called “**Android**”. It will run only on newer version of android, specifically **Android** 8.0 or newer.

## 2.3 User Environment

A user can only use this app on a device, that has an operating system **Android**. This app can be used on **Android** Tablets, phones and emulators. The app will not be significantly different from other android apps.

## 2.4 Project Scope and Implementation

This project aims to only develop a small app, that is strictly used for the authors software engineering education.

# 3. Interface requirements

## 3.1 User and Hardware Interface

This app will run on Android and a user will be able run the app on an android device.

## 3.2 Software Interface

This project heavily relies on an API “The Solar System OpenData” for information about Space Objects. Our final product will not work without this API.

# 4. System Features

## 4.1 API Communication

### 4.1.1 Overview

Communication between our app, and the API “The Solar System OpenData”. We will use the data, that this app provides in the Space Object Info Panel.

### 4.1.2 Priority

Top priority

## 4.2 Implementing data from API

### 4.2.1 Overview

Implement the JSON from API Communication component by converting the data into a database.

### 4.2.2 Priority

Top priority

## 4.3 Space Object List

### 4.3.1 Overview

A list of all space objects from the information in the database, created with the API data.

### 4.3.2 Priority

High priority

## 4.4 Space Object Info Panel

### 4.4.1 Overview

A panel with information about a space object. It will list mass, velocity, if it’s a planet, distance from the Sun, temperature and the objects moons, if it has any. The information will be acquired from the database, that was created with the API data.

### 4.4.2 Priority

High Priority