

# ParkFinder

## Software Requirements Document

### SE 3A04

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## 1 Introduction

This section of the SRS should provide an overview of the entire SRS.

### 1.1 Purpose

- a) Delineate the purpose of the SRS
- b) Specify the intended audience for the SRS

### 1.2 Scope

- a) Identify the software product(s) to be produced by name (e.g., Host DBMS, Report Generator, etc.)
- b) Explain what the software product(s) will, and, if necessary, will not do
- c) Describe the application of the software being specified, including relevant benefits, objectives, and goals
- d) Be consistent with similar statements in higher-level specifications (e.g., the system requirements specification), if they exist

### 1.3 Definitions, Acronyms, and Abbreviations

- a) Provide the definitions of all terms, acronyms, and abbreviations required to properly interpret the SRS

### 1.4 References

- a) Provide a complete list of all documents referenced elsewhere in the SRS
- b) Identify each document by title, report number (if applicable), date, and publishing organization
- c) Specify the sources from which the references can be obtained

### 1.5 Overview

- a) Describe what the rest of the SRS contains
- b) Explain how the SRS is organized

## 2 Overall Description

This section of the SRS should describe the general factors that affect the product and its requirements. It does not state specific requirements; it provides a background for those requirements and makes them easier to understand.

### 2.1 Product Perspective

Several web-services, such as Google maps or [www.ontarioparks.ca](http://www.ontarioparks.ca), are available to assist with locating parks. However, no such service is available to an off-line user. The ParkFinder app will allow users to find parks that match user criteria without necessarily the need for an Internet connection. Although all parks and their attributes will be packaged with the ParkFinder app, some search criteria will require external resources. Some of these external resources are offered by the mobile device being used, while some must be accessed over the Internet. *One such scenario is if a user wishes to locate the nearest park to their current location; the Location Services API of the device must be used to determine the users current location, as well as the Google Maps API to determine which park is closest to the users current location.*

- a) Put the product into perspective with other related products, i.e., context
- b) If the product is independent and totally self-contained, it should be stated here
- c) If the SRS defines a product that is a component of a larger system, as frequently occurs, then this subsection should relate the requirements of that larger system to functionality of the software and should identify interfaces between that system and the software
- d) A block diagram showing the major components of the larger system, interconnections, and external interfaces can be helpful

### 2.2 Product Functions

- a) The product must have available a minimum of four unique search criteria to allow the user to query a list of parks, one of these criteria shall be an online mapping service
- b) Each search criteria provided by the product must be easily replaceable by another criteria
- c) The product shall display search results to the user via a centralized “forum”
- d) Cryptosystem??
- e) asdf
- f) asdf - too much like an assignment...? make it more like a real project...

- a) Provide a summary of the major functions that the software will perform.

- **Example:** An SRS for an accounting program may use this part to address customer account maintenance, customer statement, and invoice preparation without mentioning the vast amount of detail that each of those functions requires.

- b) Functions should be organized in a way that makes the list of functions understandable to the customer or to anyone else reading the document for the first time
- c) Textual or graphical methods can be used to show the different functions and their relationships
  - Such a diagram is not intended to show a design of a product, but simply shows the logical relationships among variables

## 2.3 User Characteristics

The intended users of the ParkFinder app are people wishing to discover new parks that they have not been to before as well as people completely new to visiting parks. It is expected that the primary users will be adults however, visiting parks can be a family affair and thus some children can also be expected to use the ParkFinder. Thus we can expect the ParkFinder app to be used by children, adults, and the elderly. With such a large age range, only the most basic education levels can be expected. Being an app solely available on mobile devices, it can be expected that users will possess the bare minimum skill required to operate a mobile device. Such skills would include being able to select buttons, use a keyboard, and navigate menu screens.

- a) Describe those general characteristics of the intended users of the product including educational level, experience, and technical expertise
- b) Do not state specific requirements, but rather provide the reasons why certain specific requirements are later specified

## 2.4 Constraints

The primary constraint limiting the development teams options is time. Due to chaotic scheduling between this project and others, some minor functionality may not be implemented.

- a) Provide a general description of any other items that will limit the developer's options

## 2.5 Assumptions and Dependencies

asdf TODO

- a) List each of the factors that affect the requirements stated in the SRS
- b) These factors are not design constraints on the software but are, rather, any changes to them that can affect the requirements in the SRS
  - **Example:** An assumption may be that a specific operating system will be available on the hardware designated for the software product. If, in fact, the operating system is not available, the SRS would then have to change accordingly.

## 2.6 Apportioning of Requirements

asdf TODO

- a) Identify requirements that may be delayed until future versions of the system

# 3 Functional Requirements

This section of the SRS should contain all of the software requirements to a level of detail sufficient to enable designers to design a system to satisfy those requirements, and testers to test that the system satisfies those requirements. Throughout this section, every stated requirement should be externally perceivable by users, operators, or other external systems. These requirements should include at a minimum a description of every input (stimulus) into the system, every output (response) from the system, and all functions performed by the system in response to an input or in support of an output.

You normally have two options for organizing your functional requirements:

1. Organize first by *business events*, then by *viewpoints*

2. Organize first by *viewpoints*, then by *business events*

Choose the one which makes the most sense.

For example, if you wish to organization by business events:

BE1. Business Event

VP1.1 Viewpoint

- i. Requirement
- ii. Requirement
- iii. ...

VP1.2 Viewpoint

- i. Requirement
- ii. Requirement
- iii. ...

VP1.3 ...

BE2. Business Event

VP2.1 Viewpoint

- i. Requirement
- ii. Requirement
- iii. ...

VP2.2 Viewpoint

- i. Requirement
- ii. Requirement
- iii. ...

VP2.3 ...

OR, if you wish to organization by viewpoints:

VP1. Viewpoint

BE1.1 Business Event

- i. Requirement
- ii. Requirement
- iii. ...

BE1.2 Business Event

- i. Requirement
- ii. Requirement
- iii. ...

BE1.3 ...

VP2. Viewpoint

BE2.1 Business Event

- i. Requirement
- ii. Requirement
- iii. ...

BE2.2 Business Event

- i. Requirement
- ii. Requirement
- iii. ...

BE2.3 ...

## **4 Non-Functional Requirements**

### **4.1 Look and Feel Requirements**

#### **4.1.1 Appearance Requirements**

LF1.

#### **4.1.2 Style Requirements**

LF1.

### **4.2 Usability and Humanity Requirements**

#### **4.2.1 Ease of Use Requirements**

UH1.

#### **4.2.2 Personalization and Internationalization Requirements**

UH1.

#### **4.2.3 Learning Requirements**

UH1.

#### **4.2.4 Understandability and Politeness Requirements**

UH1.

#### **4.2.5 Accessibility Requirements**

UH1.

### **4.3 Performance Requirements**

#### **4.3.1 Speed and Latency Requirements**

PR1.

#### **4.3.2 Safety-Critical Requirements**

PR1.

#### **4.3.3 Precision or Accuracy Requirements**

PR1.

#### **4.3.4 Reliability and Availability Requirements**

PR1.

#### **4.3.5 Robustness or Fault-Tolerance Requirements**

PR1.

#### **4.3.6 Capacity Requirements**

PR1.

#### **4.3.7 Scalability or Extensibility Requirements**

PR1.

#### **4.3.8 Longevity Requirements**

PR1.

### **4.4 Operational and Environmental Requirements**

#### **4.4.1 Expected Physical Environment**

OE1.

#### **4.4.2 Requirements for Interfacing with Adjacent Systems**

OE1.

#### **4.4.3 Productization Requirements**

OE1.

#### **4.4.4 Release Requirements**

OE1.

### **4.5 Maintainability and Support Requirements**

#### **4.5.1 Maintenance Requirements**

MS1.

#### **4.5.2 Supportability Requirements**

MS1.

#### **4.5.3 Adaptability Requirements**

MS1.

### **4.6 Security Requirements**

#### **4.6.1 Access Requirements**

SR1.

#### **4.6.2 Integrity Requirements**

SR1.

#### **4.6.3 Privacy Requirements**

SR1.

#### **4.6.4 Audit Requirements**

SR1.

#### **4.6.5 Immunity Requirements**

SR1.

### **4.7 Cultural and Political Requirements**

#### **4.7.1 Cultural Requirements**

CP1.

#### **4.7.2 Political Requirements**

CP1.

### **4.8 Legal Requirements**

#### **4.8.1 Compliance Requirements**

LR1.

#### **4.8.2 Standards Requirements**

LR1.

## A Division of Labour

Include a Division of Labour sheet which indicates the contributions of each team member. This sheet must be signed by all team members.

Table 1: Division of Labour

Contributions	Name	Signature
Section 4	Abdul Ahad	
Section 3	Salma Belal	
Section 1	Josh Chatten	
Section 4	Nathanael Jordan	
Section 2	Robert Stuart	