ParkFinder
Software Requirements Document
SE 3A04

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Contents

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

Experts A search criteria used for the identification of a particular park, or group of parks. ex. An expert could be for the rentals available at a park

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

2.1 Product Perspective

Several web-services, such as Google or `www.ontarioparks.ca`, are available to assist with locating parks. However these services are not available to an off-line user. The ParkFinder app will allow its users to find parks that match their search criteria. More importantly, the app will be able to perform the majority of its search functionalities without an Internet connection, thus allowing the user the freedom to use the app whenever and wherever they want. As the ParkFinder app only requires external resources for a subset of its functionality and no external applications depend upon the ParkFinder app, it cannot be considered to be a component of a larger system.

2.2 Product Functions

a) The product shall maintain a database of parks and associated attributes

b) The app will provide a minimum of four methods for querying the park database, these methods will be referred to as "experts"

c) The experts must be separate from one another, and be easily swappable

d) One expert must be able to locate parks based on location, to do so an on-line mapping service will need to be utilized (when an Internet connection is available)

e) Results from a users query shall be displayed via a centralized "forum"

f) Messages sent between the user and the experts shall be encrypted

g) The user can select a park from the query results and the ParkFinder app shall display more detailed information about that park, including a weather report (when an Internet connection is available)

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 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.

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.

2.5 Assumptions and Dependencies

N/A?

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

N/A?

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

3 Functional Requirements

This section of the SRS contains all of the functional software requirements for the ParkFinder app. This section enables designers to design a system satisfying those requirements, and the testers to test that the system satisfies those requirements.
Note: The functional requirements are organized by business events (BE), then by viewpoints (VP).

BE1. The developer wants to change or remove an expert

VP1.1 Developer

i. The system will allow the developer to swap or remove the expert

VP1.2 Security

i. The system will check if the swap is being made by an authorized party

VP1.3 User

i. N/A

VP1.4 Geographical

i. N/A

VP1.5 Manager

i. The manager will be asked to give permission for the swap

BE2. The user wants to search for parks by amenities that are available at the parks

VP1.1 Developer

i. N/A

VP1.2 Security

i. The system will encrypt and the decrypt the user's input
ii. The system will encrypt and then decrypt the system's output

VP1.3 User

i. The system shall give the user the option of selecting between various types of amenities
ii. Search results will be displayed, showing all parks that have the selected amenity or amenities

VP1.4 Geographical

i. N/A

VP1.5 Manager

i. N/A

BE3. The user wants to search for parks by activities that are available at the parks

VP1.1 Developer

i. N/A

VP1.2 Security

i. The system will encrypt and the decrypt the user's input
ii. The system will encrypt and then decrypt the system's output

VP1.3 User

i. The system shall give the user the option of selecting between various types of activities
ii. Search results will be displayed, showing all parks that have the selected activity or activities

VP1.4 Geographical

i. N/A

VP1.5 Manager

i. N/A

BE4. The user wants to search for parks by rentals available at the parks

VP1.1 Developer

i. N/A

VP1.2 Security

i. The system will encrypt and the decrypt the user's input
ii. The system will encrypt and then decrypt the system's output

VP1.3 User

i. The system shall give the user the option of selecting between various types of rentals
ii. Search results will be displayed, showing all parks that have the selected rental or rentals

VP1.4 Geographical

i. N/A

VP1.5 Manager

i. N/A

BE5. The user wants to search for parks by parks size

VP1.1 Developer

i. N/A

VP1.2 Security

i. The system will encrypt and the decrypt the user's input
ii. The system will encrypt and then decrypt the system's output

VP1.3 User

i. The system shall give the user the option of selecting between various ranges of park sizes
ii. Search results will be displayed, showing all parks that are within the selected size range or ranges

VP1.4 Geographical

i. N/A

VP1.5 Manager

i. N/A

BE6. The user wants to search for parks by seasons when the parks are open

VP1.1 Developer

i. N/A

VP1.2 Security

i. The system will encrypt and the decrypt the user's input
ii. The system will encrypt and then decrypt the system's output

VP1.3 User

i. The system shall give the user the option of selecting between various seasons
ii. Search results will be displayed, showing all parks that are open on during the selected season or seasons

VP1.4 Geographical

i. N/A

VP1.5 Manager

i. N/A

BE7. The user wants to view more information about a specific park

VP1.1 Developer

i. N/A

VP1.2 Security

i. The system will encrypt and the decrypt the user's input
ii. The system will encrypt and then decrypt the system's output

VP1.3 User

i. The system shall give the user an overview of the park. Thus will include the highlights and popular attributes of the park, the address, phone number, size, website, and operational dates
ii. The system shall give the user information about all of the available amenities, activities, and rentals at the park
iii. The system will show the current weather conditions at the park

VP1.4 Geographical

i. N/A

VP1.5 Manager

i. N/A

BE8. The user requests to view the location or locations of a selected park or several parks

VP1.1 Developer

i. N/A

VP1.2 Security

i. The system will encrypt and the decrypt the user's input
ii. The system will encrypt and then decrypt the system's output

VP1.3 User

i. The system shall display the location of the park or parks on a map

VP1.4 Geographical

i. N/A

VP1.5 Manager

i. N/A

BE9. The user wants to find the nearest 5 parks to their current location

VP1.1 Developer

i. N/A

VP1.2 Security

i. The system will encrypt and the decrypt the user's input
ii. The system will encrypt and then decrypt the system's output

VP1.3 User

i. The system will display the closest 5 parks to the user's location

VP1.4 Geographical

i. The system will locate the user's geographical location
ii. The system will locate the closest 5 parks to the user's location

VP1.5 Manager

i. N/A

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	