

Deliverable #1 Template

SE 3A04: Software Design II – Large System Design

1 Introduction

This section of the SRS gives an overview of everything included in the SRS.

1.1 Purpose

The purpose of this document is to give a detailed description of the software. It will illustrate the features of the software, the purpose, what it will do, the requirements, any constraints, and interactions with other systems or with its environment. This document will mainly be utilized by the developers of the system, but will also be reviewed the TAs.

1.2 Scope

The "Movie Matcher" is mobile application that will help the user find a movie given some information the user knows about the movie. The application should also display information about any movies matching the user's criteria. If the user finds the movie they were looking for, they should be directed to nearby theaters that are playing the movie if it is a new movie. The user should also be given links to purchase the movie if they want. The goal of this software is to help people identify movies based on characteristics they know about the movie they are looking for.

This software will not guarantee that it will always find the correct result, or any result at all. The software will try its best to identify nearby theaters based on its interaction with the GPS in the phone. The software will also interact over an Internet connection to perform the search.

This application is intended to be used in Canada, so it will be use Canadian English text. The input to the software is expected to Canadian English as well. Also, since the application is intended for use in Canada only, the theater location service and movie purchasing features only concern Canadian theaters and retailers.

1.3 Definitions, Acronyms, and Abbreviations

- a) Developer: the people creating the software
- b) User: the person using the software

1.4 References

None

1.5 Overview

The next section, Overall Description, gives an broad view of factors that affect the system-to-be. It does not detail specific requirements, it gives background information which is relevant to the requirements. The section after, Functional Requirements, details each of the requirements for the system. The requirements are elaborated in enough detail to allow the design of the system and allow tests to be constructed. The next section, Non-Functional Requirements, contains qualities that the overall system should have. The last section, Division of Labour, states who did a certain piece of work.

2 Overall Description

Movie Matcher is an application which provides a list of possible movies matching criteria that the user gives it. To this effect the application must communicate with the user, execute internal computations and communicate with external experts. Given this environment, certain requirements must be defined in order for a clear product to be designed and developed.

2.1 Product Perspective

The Movie Matcher application is an aggregate searching tool that returns possible movies matching the query made by the client (user) modified by parameters such as cast and crew, notable quotes, as well as genre and plot description. Movie Matcher will achieve this by accessing data from external and disparate experts that will be referenced against the parameters provided by the client.

2.2 Product Functions

Movie Matcher is intended to handle the following 3 business events:

1. User enters a query
2. User sorts and selects a result

The Movie Matcher system will uniquely respond to all of these business events as follows:

1. Query its experts based on the user input parameters and process the results to return to the user a list of possible matching movies
2. The query is returned as per usual and are ordered depending on the sorting parameter

2.3 User Characteristics

The following assumptions pertain to at least 80% of our expected users:

- a) The user is able to comprehend enough of the English language to operate Movie Matcher
- b) The user is able to operate an Android OS mobile application
- c) The user has access to an operational Internet connection

Assumptions of the users is based on aspects required of the user to operate Movie Matcher in some fashion.

2.4 Constraints

- a) Application must use external connections and performance is reliant on the network that is being used
- b) The quality and format of the data of the experts is dependant on the choices of the experts
- c) The nature of the data provided by the experts may limit the possible search parameters

2.5 Assumptions and Dependencies

- a) The application will be distributed as an Android OS mobile application
- b) The application will externally communicate with the chosen experts

2.6 Apportioning of Requirements

The social aspect of Movie Matcher has yet to be defined at this time and as such will be considered later.

Thus when the social aspect of Movie Matcher is considered its requirements must be evaluated again.

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.

BE1. User enters a query

VP1.1 User

- i. The product allows the user to search for movies based on the search criteria entered by the user.
- ii. The product allows the user to enter a quote as search criteria for searching for movies.
- iii. The product allows the user to choose genre/type of movies for search criteria.
- iv. The product allows the user to enter the names of the cast for search criteria.
- v. The product allows the user to choose whether it wants to search box office movies only for search criteria.

VP1.2 Developer

- i. Developer has access to network and security.
- ii. Developer has access to a debug mode where implicit computations are visible on the console.

BE2. User sorts and selects a result

VP2.1 User

- i. The product displays the search results with each of the three experts results.
- ii. The product displays the best answer to the search result as well.
- iii. The product allows user to sort the result of the search based on search criteria including but not limited to rating, release date.
- iv. The product allows the user to select which movie to proceed with which further directs the user into a Google maps view of the location and timings of the show.

VP2.2 Developer

BE3. User selects location to navigate to

VP3.1 User

- i. The product shall display locations where the movie selected is playing.
- ii. The application shall open up the phones navigation application.

VP3.2 Developer

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.

IMPORTANT NOTES

- Be sure to include all sections of the template in your document regardless whether you have something to write for each or not
 - If you do not have anything to write in a section, indicate this by the *N/A*, *void*, *none*, etc.
- Uniquely number each of your requirements for easy identification and cross-referencing
- Highlight terms that are defined in Section 1.3 (**Definitions, Acronyms, and Abbreviations**) with **bold**, *italic* or underline
- For Deliverable 1, please highlight, in some fashion, all (you may have more than one) creative and innovative features. Your creative and innovative features will generally be described in Section 2.2 (**Product Functions**), but it will depend on the type of creative or innovative features you are including.