Software Requirements Documentation (SRD)

1. Introduction

- 1.1. Title
 - 1.1.1. Project Name
 - 1.1.2. Team Name
 - 1.1.3. Date
 - 1.1.4. Team Members
 - 1.1.5. Stakeholders/Company Honor Code
- 1.2. Table of Contents
- 1.3. Purpose
- 1.4. Document Conventions
- 1.5. Intended Audience
- 1.6. Definitions/Jargon
- 1.7. Project Scope
- 1.8. Technical Challenges
- 1.9. References

2. Overall Description

- 2.1. Product Features
- 2.2. User Characteristics
- 2.3. Operating Environment
- 2.4. Design and Implementation Constraints
- 2.5. Assumptions and Dependencies

3. Functional Requirements

- 3.1. Primary
- 3.2. Secondary

4. Technical Requirements

- 4.1. Operating Systems/Compatibility
- 4.2. Interface Requirements
 - 4.2.1. User Interface
 - 4.2.2. Hardware Interface
 - 4.2.3. Software Interface
 - 4.2.4. Communications Interface

- 5. Nonfunctional Requirements
 - 5.1. Performance Requirements
 - 5.2. Safety/Recovery Requirements
 - 5.3. Security Requirements
 - 5.4. Policy Requirements
 - 5.5. Software Quality Attributes
 - 5.5.1. Availability
 - 5.5.2. Correctness
 - 5.5.3. Maintainability
 - 5.5.4. Reusability
 - 5.5.5. Portability
 - 5.6. Process Requirements
 - 5.6.1. Development Process Used
 - 5.6.2. Time Constraints
 - 5.6.3. Cost and Delivery Date

1. <u>Introduction</u>

1.1. Title

Software Requirements Documentation (SRD)

1.1.1. Project Name

Nakama Scouter

1.1.2. Team Name

Scout Is Awesome

1.1.3. Date

April 30, 2021

1.1.4. Team Members

Aka'sh Carver: Architect

Andy Cruse: API Yikuan Du: Frontend Messiah Henderson: UI Edward Hicks: Database

1.1.5. Honor Code

We have abided by the UNCG Academic Integrity Policy on this assignment.

1.2. Table Of Contents

1.3. Purpose

The original intention of this software was to allow more people who like anime to have a better experience when watching anime. Also, we wanted to allow users to find Japanese inspired cuisine as well. Internationally, people who watch TV or anime like to eat snacks or higher-level meals while watching. Our recommendation software is to allow viewers to get more ideas and use food to increase their viewing experience.

1.4. Document Conventions

The use of acronyms is present throughout this document.

Bold and underline - Category

Bold only - Subcategory

Number followed by end parenthesis - Used instead of bullet points.

1.5. Intended Audience

People who like anime, people who want to like anime after getting a higher viewing experience, people who want to meet more friends who like anime. People who enjoy watching anime, may want to begin watching anime but do not know where to start, want to elevate their viewing experience, and connect to individuals who enjoy similar anime.

1.6. Definitons/Jargon

Anime - Short term for japanese animation that has garnered an international fanbase.

Otaku - Term that often refers to one who enjoys watching anime and general Japanese culture.

FXML - XML-based language that provides the structure for building a user interface separate from the application logic of your code.

API - Application Programming Interface

Figma - browser-based UI and UX design application

1.7. Project Scope

This project will result in the production of a JavaFX application. The application will be called "Nakama Scouter". This application will be able to recommend different anime and Japanese cuisine to users who sign up.

1.8. Technical Challenges

We are all students who are learning how to obtain API data and analyze it as we go along. At the technical level, we should encounter problems in many places such as data graphical display, UI design, user information collection and processing. Since this application will be using geolocation and creating user accounts, privacy must be carefully monitored and observed to ensure users do not become vulnerable targets for other users.

1.9. References

- 1) Whatever was made available by our Professor, Ike Quigley.
- 2) The use of internet searches to obtain un-foreknown knowledge.
- 3) Jikan API (Anime/Manga)
- 4) Documenu Restaurant Menu API (restaurants)
- 5) Google Geocoding API (location)

2. Overall Description

2.1. Product Features

The function we want to achieve in this software is to complete an account system. The user (regardless of whether it is registered or not) can recommend anime and or japanese cuisines or get anime/cuisine recommendations under specific anime tags describing various genres or tropes. Users can find and connect with other users who have the same interests as themselves.

2.2. User Characteristics

We expect our users to be people that enjoy watching anime, or want to get into the world of anime. Also, on the note of the Japanese cuisine, this will help those looking for this type of food. Due to online features, use of the geolocation, and difficulty in finding suitable anime for younger audiences this application will be intended for the 18+ age demographic.

2.3. Operating Environment

Build a simple graphical software on the PC, mainly based on Windows. Further extension is possible on more platforms, but more technical power is required, such as MacOS, Android, ios, etc.

2.4. Design and Implementation Constraints

This application will require the use of several various API services in order to perform its tasks such as Food/Recipe API, Anime API, Geolocation API, and User Messaging API. It is our duty as the creators of this application to implement these in an organized manner.

2.5. Assumptions and Dependencies

We will build software based on the Java language. It should be able to run on the latest version of Windows 10. There is no guarantee that the version before Windows 8.1/8/7 will be compatible.

3. Functional Requirements

3.1. Primary

- 1) It should take in a user's information and store it for profile purposes.
- 2) It should be able to recommend different shows and food based on certain tags.
- 3) It should provide details of different shows and food for the user to be able to make an educated decision.

3.2. Secondary

1) It should show users that are close to one another, based on geo location.

4. <u>Technical Requirements</u>

4.1. Operating Systems/Compatibility

This application is intended to work on all PC's and MACs that have a way to run JavaFX applications.

4.2. Interface Requirements

4.2.1. User Interface

1) JavaFx

- 2) SceneBuilder
- 3) Figma

4.2.2. Hardware Interface

The base operating requirements of PC and MAC are needed to run this application.

4.2.3. Software Interface

- 1) JavaFx
- 2) FXML
- 3) Java
- 4) MS Word
- 5) Web Browser: Microsoft Internet Explorer, Mozilla, Google Chrome, Safari, etc.
- 6) Internal Server
- 7) Operating System: Windows 10

4.2.4. Communications Interface

Email, network connection, and being a certain age are all required for this application.

5. Nonfunctional Requirements

5.1. Performance Requirements

A working machine, such as PC or MAC, is required to run this program.

5.2. Safety/Recovery Requirements

The database of the profile information of users is stored on multiple computers. So if one computer loses the information, another is available as a backup.

5.3. Security Requirements

The storing of the user's information is solely used for profile purposes. No data about a user will be shared with anyone, unless stated by the user otherwise. Moreover, logs to profile information are not accessible to the common user, solely the developers of the application.

5.4. Policy Requirements

The use of certain applications to build this project may have different policies that need to be adhered to.

5.5. Software Quality Attributes

5.5.1. Availability

This application will be available anytime for the user to access their profile and to get recommendations. Also, as long as access to the APIs used is maintained, the application will continue to run as intended.

5.5.2. Correctness

The program should give information about different Anime shows, as well as providing information about restaurants that serve Japanese inspired cuisine.

5.5.3. Maintainability

As long as the application has access to the APIs used, the maintenance aspect should not be a problem.

5.5.4. Reusability

This application can be used with different APIs to gather different information if need be.

5.5.5. Portability

This application should run on Windows and MAC, as long as there is a way to run a JavaFx app on the user's machine.

5.6. Process Requirements

5.6.1. Development Process Used

- 1) S.O.L.I.D.
- 2) Github
- 3) Scrum

5.6.2. Time Constraints

We were only given the duration of the semester to finish this project. Most of the developers involved had other classes and duties to attend to, while also having to deal with a mainly internet interaction approach.

5.6.3. Cost and Delivery Date

Cost of production was negligible. The delivery date was April 30th, 2021.