

Compensation Analysis Tool

Software Requirements Specification

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1 Introduction

1.1 Purpose

1.2 Objectives

The objective of this project is to produce a software tool used to assess and rank the most viable locations to start a career in a particular field. The software will produce a list of locations that offer the best income potential for a particular career or field using a mixture of employment and cost of living statistics. In addition, the software will include an option to consider the possibility of commuting in order to reduce the cost of living.

1.3 Scope

The application will be geographically limited to the United States and will only consider income related factors to arrive at a ranking. These limitations may be expanded upon in the future, but such enhancements are beyond the current scope of the application. The application will be implemented in Java and will be able to be run on any desktop, laptop, or other device with the ability to execute JAR (Java Archive) files.

The stakeholders of this project include the team members, the instructor and teaching assistants of the CAS 2XB3 course, and any persons seeking employment who would use the tool.

1.4 Definitions, Acronyms, and Abbreviations

1. to be completed.

1.5 Overview

2 Overall Description

2.1 Product Perspective

2.2 Product Functions

a)

2.3 User Characteristics

The user of this application is expected to...

2.4 Constraints

The following constraints apply in the development of our application:

1. All milestones outlined in the CAS 2XB3 project description must be met.
2. All deliverables must be completed in their final form by the due date given in the CAS 2XB3 project description.

2.5 Assumptions and Dependencies

The following assumptions were made in the development of our requirements:

1. The computer/device used to run the application will have the ability to execute JAR files.

2.6 Apportioning of Requirements

2.7 Risks

The risks that may need to be overcome during the implementation of this project are

1. Using the Data sets to give users accurate and up to date results of potential employers.
2. Using Google Maps API to allow the user to use their location to allow app to show results in their area.
- 3.

2.8 Schedule

3 Functional Requirements

BE1. VP1.1 User

i.

VP1.2 Application

i.

VP1.3 Legal

i.

4 Non-Functional Requirements

4.1 Look and Feel Requirements

4.1.1 Appearance Requirements

- AR1. The Application should have a default bright and colorful scheme, using uniform colors and a uniform layout.
- AR2. All tabs, buttons and input fields must be easily visible.

4.1.2 Style Requirements

- SR1. The Application should provide a uniform look and feel between all the pages and tabs.
- SR2. Results returned from the input must be clear and uniform.

4.2 Usability and Humanity Requirements

4.2.1 Ease of Use Requirements

- EUR1. Searching through career fields, and finding the needed result must be easy and fast to do.
- EUR2. Choosing your current location, and accepted radius must be easy to do.

4.2.2 Learning Requirements

- LR1. The product should have an intuitive layout, it will take the user no longer than 10 minutes to learn to use.

4.2.3 Understandability and Politeness Requirements

- UPR1. Application must use proper English, and must be easy to read.
- UPR2. No inappropriate language must be included.

4.2.4 Accessibility Requirements

- ACR1. Font sizes, input boxes, and results should all be appropriate size.

4.3 Performance Requirements

4.3.1 Speed and Latency Requirements

- SLR1. Load times between the user inputting their information to the program giving the results must take no longer than 10 seconds.

4.3.2 Precision or Accuracy Requirements

- PAR1. The application must give appropriate results depending on the exact radius the user requested.
- PAR2. Inputted radius must be accurate to 100 meters.

4.3.3 Reliability and Availability Requirements

- RAR1. The system shall be available at all times.

4.3.4 Robustness or Fault-Tolerance Requirements

- RFR1. The application must give the user a relevant error message when an error occurs.
- RFR2. The application must insure the user inputs all necessary fields before searching.
- RFR3. The application must save the users previous entries.

4.3.5 Longevity Requirements

- LONGR1. The application must run as long as it is on a compatible OS.

4.4 Operational and Environmental Requirements

4.4.1 Expected Physical Environment

- EPE1. The application will be used by users looking for potential employment.

4.5 Maintainability and Support Requirements

4.5.1 Maintenance Requirements

- MR1. The system should be documented in such a way that maintaining and updating it is easy for programmers who did not build it initially.

4.5.2 Supportability Requirements

- MSR1. The application must run on windows, and be accessible to anyone with a windows computer.

4.5.3 Adaptability Requirements

- MAR1. The system should be built in such a way that adding entirely new features does not require the rewriting of old features.

4.6 Security Requirements

4.6.1 Access Requirements

SAR1. The Application will be accessible to windows users.

4.6.2 Privacy Requirements

SPR1. The system shall protect the privacy of users, not allowing users to access others users personal information

4.7 Cultural and Political Requirements

4.7.1 Cultural Requirements

CCR1. The product will use Canadian English spelling.

4.8 Legal Requirements

4.8.1 Compliance Requirements

LCR1. This product will comply with the Personal Information Protection and Electronic Documents Act.

LCR2. This product will comply with the Ontario Freedom of Information and Privacy Act.

5 References