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Software Requirement Specification for Shopping Route Recommender

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1 Introduction

1.1 Purpose

1.2 Document Conventions

1.3 Intended Audience and Reading Suggestions

1.4 Project Scope

1.5 References

2 Overall Description

2.1 Product Perspective

The Shopping Route Recommender is an application used by consumers to maximise their shopping experience in terms of three preferred optimisations: minimum cost, travel distance and travel time. The consumer is able to log onto a Website or Smartphone application and create a shopping list with a desired route being generated. Enabling a user to optimise their shopping experience is a potential success from the start, as their daily routines can become more efficiently and effectively undertaken. The application's use is not only restricted to the general public, but can also be used by businesses and companies involved in the stock collection courier service industries. The application is aimed at being user friendly, simple, and interactive with maximum customisation being a priority aspect in order to maximise an individuals needs.

2.2 Product Features

The list of product features below aim to provide an easy-to-use, customizable application interface for all users.

- Interactive shopping list menu.
  - add or remove item
- Interactive optimisation selection options.
  - minimise cost
  - minimise travel time
  - minimise travle distance
- Interactive shopping area selection options.
  - select from a number of suburbs or regions

- Interactive route map displaying alternate routes for selection.
    - rotate map
    - slide map
    - zoom in/out
    - satellite view

2.3 User Classes and Characteristics

The application is aimed for the general public's use as well as certain business industries.

- General Public
    - General population wanting to buy their routine shopping list
    - General population looking for more specific products and their preferred optimised route
    - Foreign individuals looking for their ideal shopping locations or travel routes
- Business Industries
    - Courier companies collecting stock or products from various distributors/stores

2.4 Operating Environment

Shopping Route Recommender is an application designed to run on the most Web Browsers as well on Google Android and Mac OS X Smartphones.

- Software Requirements
    - Internet connectivity
    - Entry level Smartphone
    - Mozilla Firefox, Microsoft Edge, Google Chrome, Microsoft Explorer, Safari
- Hardware Requirements
    - Entry level Smartphone with interactive touch screen

2.5 Design and Implementation Constraints

Shopping Route Recommender is platform independent and is written in language. In addition, Google Maps API is implemented for generating the desired optimised shopping route. The accuracy of the generated route and optimisation algorithms is therefore dependent on the accuracy of the Google Maps detailing.

2.6 User Documentation

A general help and FAQ menu will be provided within the application. This will function as the "user manual" of the application.

2.7 Assumptions and Dependencies

3 System Features

3.1 System Feature 1 -

3.2 System Feature 2 -

3.3 System Feature 3 -

4 External Interface Requirements

5 Other Non-functional Requirements

References

[1] Fluid Switch. *Airplane Fule Gauges: How they Work, Challenges, & Solutions*. Fluid Switch. URL: http://www.fluidswitch.com/blog/airplane-fuel-gauges/. [Accessed: February 15, 2016]