

# Description

Group5

August 14, 2017

## **Introduction .** Group 5 - Project 3 - Shopping Route Recommender, SRRec

The Shopping Route Recommender (SRRec) enables a shopper to map out a route of the nearest shops in the neighbourhood to visit to meet all his/her shopping needs on a shopping day. The shopper identifies any items (groceries, clothing, appliances, etc.) that he/she needs and these items are recorded into a shopping list. On the users required shopping day, he/she will run the SRRec to obtain a recommended route of shops to visit in a particular order according to the items he/she has listed.

Our team will be building a web-application for the SRRec, so that the user may access it on his/her pc and mobile device (through the browser). To start off this web-application, we will be working on a small world example for now, e.g. there are only 3 stores available within the user's vicinity.

Current assumptions: -The starting location is the user's home, for now. -Each store follows a similar database structure and the same naming conventions. -We will not take brands into account, but will use simple item names instead, e.g. bread, milk, cheese, etc. -We will not take stop-overs into account, for now. Stop-overs include stopping for coffee, drinks, lunch, etc.

Front-end: This will include using HTML, CSS, Javascript, and integrating a Bootstrap template to build the User Interface of the web-application. Back-end: We will be making use of the ASP.NET MVC (modelviewcontroller pattern) framework within Visual Studio to build the back-end of the web-application, thus we will code in C-Sharp. We will also make use of MySql to build the database. We will integrate Google Maps API into our web-application in order to map the locations of each shop and perform adequate pathing for the recommended route.

Group members and responsibilities:

Storm Menges: Front-end lead

Sergio Oliveira: Back-end lead

Levi Goldfein: Back-end lead

Sabeegah Ismail: Documentation lead

The above responsibilities show who will take on the lead for which project tasks. The team will, however, collaborate together on each part of the project where needed.

For our SRRec web-application, the inputs will be the items that the user selects, for which he/she needs to go shopping. These items will be recorded into a shopping list. When the user requests for a recommended shopping route, the web-application will output the shortest route based on minimal total expenses. As a team, we will further discuss and decide on how to go about the pathing algorithm as we may include petrol cost into the expenses for the route, e.g. R3/km.

Team communication, task allocation and progress tracking: Our team will make use of Whatsapp for casual project discussions or details of meeting preparations, e.g. date, time, and place to hold a team meeting. We currently aim to hold two meetings every week to discuss details of our project such as documentation and plans for implementation. We will document these meetings by recording the minutes. We will make use of the Scrum technique via the website "www.kanbanflow.com" to assign tasks to each member and keep track of the team's progress. We will also hold a quick stand-up session in each meeting for members to talk about their current workings/progress and difficulties. Google Drive may be used to store documents for each member to view and edit.