Shopping Route Recommender

ELEN 4009 Software Engineering Project 2016

The projects primary focus is on documenting the process of designing a software product

Product Summary

The Shopping Route Recommender is a web application that aims to improve the general publics day-to-day life. The product proposes to do this by reducing the associated stresses of shopping. In specific that application aims to:

- Allow users to add items to a shopping list on an adhoc basis
- Generate a route that optimises based on either of the following user inputs:
  - Fastest possible route to obtaining all the products
  - Shortest possible route to obtaining all the products
  - Cheapest possible route to obtaining all the products

Prerequisits

- Install apache2 server and PHP5
- Install and setup postgresql
  - `sudo apt-get install postgresql-9.3`
  - `sudo apt-get install php5-pgsql`

Setup

NOTE: If the user has already installed postgresql they may need to edit the .php files and change the password

- Create a postgresql database called `srrec`
  - `sudo -i -u postgres`
  - `createuser --interactive`
    * username: `srrec`
  - `psql postgres`
  - `\password postgres`
    * password: `srrec`
  - `ctrl + d`
  - `createdb srrec`
  - `psql srrec`
  - `\password srrec`
    * password: `srrec`

Running the back-end code

Copy the .txt files located in `Code/back_end/` into the root folder of postgresql, the default for this on Linux is `/var/lib/postgresql/9.3/main` > `sudo cp -f *.txt /var/lib/postgresql/9.3/main`

NOTE: The following steps are temporary implementations until properly integrated with the front-end

Create the database tables - from within the /Code/back_end/ folder run: > `php setup_database.php`

Create the possible permutations for the shopping list saved on the database, run: > `php database_permutations.php`

Create 2D array containing all locations for different routes (each route is a row and each column in a row is a waypoint), run: > `php get_route_information.php`

Running the front-end code

Copy the contents of the /Code/front_end/ into the root folder of the apache2 server, the default location for this in Ubuntu is: `/var/www/html/`

Open your web-browser and access `localhost/index.php` - All other web pages will be accessible from this page