

Project Specification

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Contents

1	Introduction	2
1.1	Purpose	2
1.2	Definitions	2
1.3	System Overview	2
2	Overall Description	2
2.1	Product Perspective	2
2.1.1	Software Interfaces	2
2.1.2	User Interfaces	2
2.2	User Characteristics	3
2.3	Product Functions	3
3	Specific Requirements	3
3.1	Interface Requirements	3
3.2	Functional Requirements	4
3.3	Performance Requirements	4
3.4	Database Requirements	4
3.5	Software Requirements	4

1 Introduction

1.1 Purpose

The purpose of this document is to describe the prospective product in detail, outlining specific requirements that it must adhere to.

1.2 Definitions

- Journey - A proposed journey following a route between an origin and destination by a person.
- Hitch - When a person joins a Journey by taking up a spare seat on a Journey.

1.3 System Overview

The purpose of the Online Carpooling Service is to provide drivers with the ability to post the details of prospective Journeys, enabling non-drivers to travel in the same direction by joining them on their Journey. The motivation for this project is to share the cost of the Journey amongst people who would have otherwise travelled using separate transport modes. As a student I often drive long distances from university to my home town in my car without anyone to share the cost of fuel with.

2 Overall Description

2.1 Product Perspective

2.1.1 Software Interfaces

An Object Oriented software model should be developed to control data flow to and from the database and will be the only method of performing actions on it. It should be developed in such a way that the website can easily exploit data within the database by calling upon specific procedures within the API via HTTP.

2.1.2 User Interfaces

The Website will be the interface for the user base. Using it, they will have access to all of the features that the service offers and will be able to update their profile enabling suggestions to be put forward to them by the service.

2.2 User Characteristics

People who sign up to the site will provide personal information which will be saved in the database. This personal information will aid the service in producing Journey and Hitch suggestions.

The users accessing the site will use it to share journeys that they are partaking in with the aim of attracting other users to join them in those journeys. Conversely, the site is there for users who wish to find journeys that other people are driving, so that they can hitch a journey.

2.3 Product Functions

The main functions of the site will be:

- Register as a new user to the site
- Log in with existing details
- Edit profile details
- Post a Journey that the user will be driving from location to location
- Search for journeys between two locations
- Request to Hitch a journey as a passenger
- Accept or decline a hitcher as the driver
- Send messages to other users on the site

3 Specific Requirements

3.1 Interface Requirements

The website interface must provide the following services:

Index Page The index page must provide:

FR.I.01 Register Form - The page must provide an easy to access register form for personal details to be entered upon registration. Basic details needed are Email address, First name, Last name and Password. More specific details can be entered after registering to the site

FR.I.02 Log Form - There must be a section of the page dedicated to logging in existing users. It must be easily viewed and apparent to users.

Home Page When a person logs into their account, they must be provided with a home page with the following:

- Their scheduled Journeys.
- Their scheduled Hitches.
- Messages from other users.
- Suggested Journeys and Hitches.
- A Journey search section.

3.2 Functional Requirements

The system must enable a Person to:

1. Register their details to the service to produce a user account.
2. Post Journey details to the service.
3. Cancel a Journey.
4. Search for Journeys using a specific origin and destination.
5. Request to Hitch a Journey.
6. Accept or Decline a Hitch request from a hitcher.
7. Cancel a Hitch.

3.3 Performance Requirements

3.4 Database Requirements

3.5 Software Requirements