# 2 Overall Description

## 2.1 Product Functionality

This website has a multitude of functionalities. The customer will be able to log in, browse a variety of cars, customize his choices and rent the perfect vehicle. He will also be recommended other vehicles based on his choices. There are also options for newsletter, personal profile and other feedback functionalities. Guests can also view customer-type functionalities of the site, but their abilities are limited.

Various pages with full support for car rental services are also implemented, covering a wide variety of options. Therefore, great interactive potential is offered.

Administrators will have full control of the database, their ability to add cars to rent, review all rented cars and statistics about the users ensures good functionality and quality. Admins can also view feedback of users.

Several goals that the site will accomplish are:

1. Each brand has names and details. Each type has names and details.
2. Each car is in a class (compact, limousine, etc.).
3. Each class has name and description.
4. There is a list of customers who have first names, email, phone, address.
5. A rental history is preserved (what customer rented what car, since when to until when.).
6. Each car will retain its current status (rented, unrented)
7. A record of unwanted customers who have had incidents during the rental is kept.
8. The company has in stock a number of cars with a license plate number, no. of km travelled, date of manufacture, a brand, type and price per hour.

## 2.2 End Users and Characteristics

This website will be used by three types of users.

* Admin – the administrator will be able to access a database of customers, update certain parts of it and also add car listings for the customers to rent.
* Customer – The users which have logged in are considered customers. They will be able to rent a vehicle, view their rented vehicles, receive recommendations and use various interactive options on the website such as signing up for a newsletter and sending messages to the admin.
* Guest – Users which have not logged in, have limited accessibility to the website. They will need to log in to rent vehicles and use the rest of the services, however they will still be able to browse the website fully.

There are mainly four types of customers:

1. People in need of transportation, who will regularly use the car rental services.

2. Tourists who will require a rental to get around the city easier.

3. Car enthusiasts who simply enjoy driving different cars as a hobby.

4. People that want to buy a car and prefer to ride a rental before making a decision.

If it is necessary, the website should undergo design changes to all existing pages to shorten up

paragraphs and add bullets and charts where possible to accommodate faster page reading and shorter reader attention span keeping in mind most of the users do not have great technical expertise and are looking for a simple and well-structured car presentation in order to rent it easier.

## 2.3 System Stakeholders

The system stakeholders could be:

|  |  |
| --- | --- |
| Acquirers | Oversee the procurement of the system or product |
| Assessors | Oversee the system’s conformance to standards and legal regulation |
| Communicators | Explain the system to other stakeholders via its documentation and training materials |
| Developers | Construct and deploy the system from specifications (or lead the teams that do this) |
| Maintainers | Manage the evolution of the system once it is operational |
| Production Engineers | Design, deploy, and manage the hardware and software environments in which the system will be built, tested, and run |
| Support Staff | Provide support to users for the product or system when it is running |
| System Administrators | Run the system once it has been deployed |
| Testers | Test the system to ensure that it is suitable for use |
| Users | Define the system’s functionality and ultimately make use of it |

## 2.4 Operating Environment

This software being developed will be compatible with machines running on Windows.

Development will be done using XAMPP Control Panel, MySQL, Apache Server, MariaDB. The website will be written using HTML, CSS, PHP and javaScript.

Mozilla Firefox will be the main browser used to test the web site, however it will be tested on Google Chrome, Microsoft Edge, etc.

All databases and functional components will be stored on a personal computer for testing purposes. Databases and servers are handled by XAMPP control panel that will deploy Apache server and MySQL.

The hardware that will be used in developing this program consists in an Intel i5-6300HQ CPU, 8 GB RAM, Nvidia GeForce GTX 950M 4 GB. The website will work on almost any machine, so the minimum requirements are trivial. The synchronization procedures will be written to interface with Windows operating systems. There are no software components that are in conflict with this project, the website can be tested as is.