1-Purpose :

This is a software requirement specification for an automated parking garage system and how it work and we need in this document to show what the system will do.

it is avalible for project and system manager , developers of the system producer of company,workers in the garage and customers who will make a reservation .

2-scoop :

This software system will be an automated parking garage system for everybody need to park his vehicles. We will focus in Registration and reservation system , garage system , customer and manager abilities .

This system will be designed to show how this system will help customers to parking their vehicles by reservation . the garage have an groud level and above it there is many decks and just the passenger vehicles can enter the garage . customer can make a reservation by register in the company website and to ensure the reservation must go to the garage and find a free spot and can also edit or cancel his reservation within a certain time . the garage will be save as it have licence plate readers to recognition the licence plate . customer can make a guaranty reservation by make a long time contract . there will be a back up for all data to prevent problems. Manager will check system to know many of important things and can change some informarion .

3- Definitions :

Occupancy : it describe how system work .

Elevator : it is some thing to lift the vehicles .

## 4 – Function Requirments :

1. check customer vehicle :

Customer say that he/she own the vehicle or it rented or borrowed .

2. Registration :

Every customer before anything must register in the company website by put his information , credit card number and his email and this data will be stored because we will need it again. And system must check customer vehicle if he own it he must put the vehicle licence plate number else he can register without it .

3. Admin :

He put his name and login the system.

Once he enter the system he can see reports and edit the price of parking by change it by increasing or decreasing . he can also view the number of reservations and walk\_ins.

4. Back up :

We must storing all accounts informations ,parking data and daily reports and its very important because when an problem happen we can restore it.

5.view customer info :

It will check customers in stored data and view their information.

6. check empty spot :

First when the customer arrive to rhe garage system must know if the customer registered or not if he registered system make a reservation to him and find to him a free spot to use it if there is .

7. Reservation :

If customer registered the system search for an empty spot if system found a free spot it will make a reservation for him else it will print no free spots.

8. check Licence plate :

First must see the licence plate number of the vehicle and then recognize it and if found it in

Stored data will set it in it's spot .

9. check spots accupancy:

System check if there is a free spot by compare number of reservation with the garage capacity if the output view that the capacity of the garage is greater than number of reservation will print that there is a free spot else will print not.

10. check garage capacity :

First will initialize it by put any number and this number will decrease with every reservation until it equal number of reservation and will output garage is full .

11 .update reservation :

Customer can change or cancel his reservation and after that the output will delete his reservation from the stored data.

5- Actors :

1. manager , 2. Customer

6- use cases :

Customer registration , manager change prices , customer change reservation ,

Customer provide his data , manager view the number of reserved cars.