Vision and Scope Document

for

LuminiPark

Version 1.0

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1. Business Requirements

The software system for LuminiPark will be made to automate the entry to parking lots around the city and with this way, the users will be able to have recordings about the payment amount related with the time that they have been in the parking and so they will be able to pay more easily.

1.1. Customer or Market Requirements

User stories:

US1.The system should register each user in the database with a name, last name, email, password, cell phone number and at least one payment method.

US2.The system shall recognize a QR code to enter parking lots.

US3.The system shall recognize a chip to enter the parking lots.

US4.The system will recognize the plate from cars to enter the parking lots.

US5. The system should register the favorite entry method to parking lots.

US6.The system shall record the payment amount according to the time that users occupy the parking.

US7.The system must record and show occupied spaces into the parking lots.

US8.The system must record and show vacant spaces into the parking lots.

US9.The system must record the hour when the user entered the parking lots.

US10.The system must record the hour when the user exited the parking lots.

US11.The system shall allow the admin to add new parking lots.

US12.The system shall have a monthly recording about how many cars entered the parking lots.

US13.The system shall have a monthly recording related to how much incomes entered the system.

1.2. Value Provided to Customers

The software system will give our customers these values:
- Automation to enter parking lots.
- Facilities to pay.
- Facilities to find some space in the parking lots.

1.3. Business Risks

The software system might generate these risks:
- Unpaid users.
- Trapped users in parking lots.
- Loss of internet inside the parking lots.

2. Vision of the Solution

Once the system or software is created and reviewed, the hardware systems can be installed in the different parking lots that want to implement the new parking entrance automation system, even a new entity can be created for the parking lot database. places where the system works.

2.1. Vision Statement

The intention of the product is to automate the way in which people or cars enter the parking lots, in addition to facilitating payment methods and not making long lines in shopping centers or in different places that have this system, it will also help users to anticipate where they can park and find parking more easily.

2.2. Major Features

1. *The system will recognize the plate from cars registered previously in the app to enter parking lots.*
2. *The system will recognize a chip stuck in the car to enter parking lots.*
3. *The system will read a QR code to enter parking lots.*
4. *The system will indicate the vacant and occupied spaces in the parking lots.*
5. *Users will be able to pay through the app.*
6. *The system shall have a monthly recording about how many cars entered the parking lots.*
7. *The system shall have a monthly recording related to how much incomes entered the system.*

3. Scope and Limitations

The scope of the project may be wide according to the performance of the system and how safe it is, it may reach shopping centers or places crowded by people, it will also depend on the rates or price that will be charged in each place and if these establishments agree with the product.

3.1. Scope of Initial Release

In the initial product, 3 forms of recognition will be developed and implemented to enter the parking lots, which are plate recognition, recognition by a sensor or chip and reading a QR code, in addition to checking the empty or occupied spaces.