**Software purpose** : is to track and manage occupancy of a parking garage and allow customers to find and reserve available parking places.

**Software scope :**

* The parking garage currently operates without any computerized system
* The management has concerns about inefficiencies of sub-optimal usage of parking space (lost opportunity/profit).
* Congestion inside the garage is often caused by drivers searching for vacant spots
* it is well known that a great deal of traffic congestion in cities generally is caused by drivers looking for a parking space.
* Currently, the management monitors the garage occupancy by having employees walk around the decks to inspect the occupancy of individual spots
* spots.sensor system which keeps tally of the vehicle entrance and exit events that occur in the parking structures

## The Requirements :

| phrase | Definition |
| --- | --- |
| **Admin** | Mainly responsible for adding and modifying parking floors, parking spots, entrance, and exit panels, adding/removing parking attendants, etc |
| **Customer** | All customers can get a parking ticket and pay for it |
| **Parking attendant** | Parking attendants can do all the activities on the customer’s behalf, and can take cash for ticket payment |
| **System** | To display messages on different info panels, as well as assigning and removing a vehicle from a parking spot |
| **Add/Remove/Edit parking floor** | To add, remove or modify a parking floor from the system. Each floor can have its own display board to show free parking spots |
| **Add/Remove/Edit parking spot** | To add, remove or modify a parking spot on a parking floor |
| **Add/Remove a parking attendant** | To add or remove a parking attendant from the system |
| **Take ticket** | To provide customers with a new parking ticket when entering the parking lot |
| **Scan ticket** | To scan a ticket to find out the total charge |
| **Cash payment** | To pay the parking ticket through cash |