**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 system-as-is can be described as follows. 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. In addition, 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.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 |