12/07/2022

PROBLEM STATEMENT-2:

**“AUTOMATIC PARKING”**

* You know I am always in a hurry to catch the flight.
* I don’t have time to search for a parking space in the parking lot.
* You know I am paranoid of somebody else driving the car.
* Design an automatic parking system for our Mercedes you know it is a drive by a wire car.

SOLUTIONS:

* Generally, a parking lot provides a service for parking.
* The parking lot must organised in such a way that the space must be effectively used.
* The parking lots can be constructed in various ways like circular, rectangular.
* We can develop or utilize various websites for the controlling of the parking systems.
* In case of emergencies like catching flights, we can provide user a pre-booking service which helps them to reserve their place in the lot.
* Various sensors can be used in order to detect the empty spaces in the lot and fill them accordingly.
* As the main moto of the lot is to park the vehicle and protect it, it is very important to design the layout in such a way that none of the cars get crashed.
* The major example for the automatic parking is SKY PARKING which is followed in US.
* We can implement the theme of barcode scanner or QR code scanner in front of the lot to pre-book it.
* If the lot is pre-booked by a user then they should update it on the website so that others can book the same slot for some other time of the day.
* For safety purposes we can use the lock system for the vehicles which can be operated via fingerprint and face recognitions.

ENTRANCE EXIT

CAR

CAR 7

CAR 2

CAR 8

CAR 1

“An overview of automatic parking”.

CAR

CAR 6

CAR 5

CAR 4

CAR 3

PROBLEM STATEMENT-3:

**“AUTOMATIC MEDICINE REGULARLY”**

* You know papa & mamma have amnesia.
* They keep forgetting to take their pills regularly.
* Sometimes they get confused and interchange each other medicines.
* They need to get prescriptions for refill automatically from the doctor and the doctor also needs to know that they are taking their medicines properly.
* Also need to be updated on their consumption of medicines.

SOLUTIONS:

* To solve this we need a smart automatic medicine dispenser.
* The machine must be capable of giving medicine to the patient time to time appropriately.
* Some sensors must be included so that they detect the medicine properly and use of a memory chip helps the device to re-fill the medicines on time.
* For people who are visually impaired medicines can be delivered in a way where machine announces the time and dispenses the medicine.
* They can have preloaded cartridges of pills and syrups which are into use when the medicines are about to over.
* We can develop a dispenser in which there is no need to remove the tabs separately and divide into compartments.it removes the plastic by itself.
* We can monitor the user about their medicine consumption. They can be well tracked.
* It must send particular messages to the doctor regarding the consumption of medicine through a message developed in an app.
* Barcodes or sensors can be equipped for verifying the correctness of loading.
* A fully fledge remote control should be provided.
* Machine must be able to set an alarm for the medicine intake and ensure to send the necessary information to the caretaker.
* Health can also be monitored by wearables like smart watches nowadays. It measures
* Oxygen level (Spo2)
* Heart rate
* Blood pressure
* Exercise modes
* For the user recognition a fingerprint or a face- recognition sensors can be used.
* It must have the capacity to dispense the medicine based on pre-loaded schedule.
* For diabetic patients, even insulin dosage can be easily provided.
* The machine can check the expiry date of medicine, should be flexible and easy to use.
* It must also give certain periodic remainders to the user and maintain their health.
* It must be programmed in such a way that it must be capable of re-filling the medicines by ordering through various E-applications like Apollo,1mg etc.
* It can also be designed in a way where it keeps on snoozing till the user takes the medicine.
* An app can be developed to link this device with the caretaker’s phone.