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Parking Availability and Gate Control Systems are contemporary answer to the increasing number of cars and the limited number of free space available for purposes, especially in city areas.

It is a very useful method that to tell drivers to park in specific place and open gate automatically to reduce the cost and time.

The parking availability system will indicates whether there is any unoccupied parking slot available in the parking area, while the gate control system will allow or disallow drivers enters the parking area depending on the availability of the parking area

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We will try to develop a Parking Availability and Gate Control System using PLC and HMI.

We will try first to build a physical model for the barking of two floors (6 cars) then design the control hardware to control the gate and view the availability in the parking.

Then we will write the ladder program of PLC and the HMI program and implement the controller to the model.

Finally as possible we will try to improve the software to meat real life demands, the software will scaled up to reach the capacity of 60 cars.

finding a parking place is becoming a challenge, especially in big cities and popular destinations

