CMR UNIVERSITY

Private University Established in Karnataka State by Act No. 45 of 2013

SCHOOL OF ENGINEERING AND TECHNOLOGY

A Project Report on design of

"PARKING LOT USING ARDUINO"

Submitted in partial fulfilment of the requirements for the award of degree in

BACHELOR OF TECHNOLOGY
IN
COMPUTER SCIENCE AND ENGINEERING

SUBMITTED BY	GUIDED BY
SATYAM RAI 21BBTCS205 B.Tech CSE	**Mr. Hitesh Panda** Assistant Professor, Dept. of ECE

Department of Electronics and Communication Engineering
Off Hennur - Bagalur Main Road,
Near Kempegowda International Airport, Chagalahatti,
Bangalore, Karnataka-562149

2022-2023

SCHOOL OF ENGINEERING AND TECHNOLOGY

Chagalahatti, Bengaluru, Karnataka-562149

Department of Electronics and Communication Engineering

CERTIFICATE

This is to certify that the Project entitled "**DESIGN OF PARKING LOT USING ARDUINO**" has been successfully carried out by **SATYAM RAI** bearing the USN **21BBTCS205** in partial fulfilment of the requirement for the award of the degree **Bachelor of Technology in COMPUTER SCIENGE AND ENGINEERING of CMR University,** Bangalore during the academic year **2022-2023.**The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

Signature of Guide
(Mr. Hitesh Panda)
Assistant Professor
Dept. of ECE

Signature of HOD
(Dr. Satheesha T. Y.)
Professor and Head
Dept. of ECE

Examiners Signature with date:
1.
2.

ACKNOWLEDGEMENT

The satisfaction that accompanies the successful completion of this project would be incomplete without the mention of the people who made it possible, without whose constant guidance and encouragement would have made efforts go in vain.

I consider myself privileged to express gratitude and respect towards all those who guided me through the completion of the project. I express my heartfelt sincere gratitude to **Dr. V.R. Manjunath**, Dean, School of Engineering and Technology, CMR University for his support.

I would like to express my thanks to **Dr. Satheesha T Y, Professor and Head**, Department of Electronics and Communication Engineering, School of Engineering and Technology, CMR University, Bangalore, for his encouragement that motivated me for the successful completion of Project work.

I express my thanks to my Internal Project Guide **Mr. Hitesh Panda, Assistant Professor**, Department of Electronics and Communication Engineering, School of Engineering and Technology, CMR University for his constant support.

I would like to thank all the professors and staff of the Electronics and Communication Engineering department for their Co-operation and timely guidance.

SATYAM RAI

21BBTCS205

ABSTRACT

The main aim of this project is to reduce the traffic in the parking place. Normally we can see in the multiplexes, cinema halls, large industries, and function halls there is problem they must go and search which line is empty and which line having place to park the vehicle, for parking then they need workers for parking in correct position it is the money consumed process. So, to avoid this problem in Parking Area this project is implemented.

In this Electronics and communications project, we must use the equipment's of microcontroller (Arduino UNO), Infrared Sensor and infrared receivers for the main gates of the parking area, IR sensor and receivers should be connected to the microcontroller. while enter gate for parking there is the display to get the information regarding which place is empty. This information is given by the IR sensor to the microcontroller. The microcontroller first gives the information to the motor then using this the total no. of places is determined and then this information is shown on the display, so by this process the parking is easy process. So, the traffic can be reduced in the parking place of the theatres, multiplex, and in large industries and in commercial places.

SATYAM RAI

21BBTCS205

DECLARATION

I SATYAM RAI (Reg. No. 21BBTCS205) student of 3rd semester B.Tech. Computer Science Engineering, School of Engineering and Technology, Bangalore, hereby declare that the project work entitled **"DESIGN OF PARKING LOT USING ARDUINO"** has been carried out by me under the guidance of Mr. Hitesh Panda, Assistant Professor, Department of Electronics and Communication, School of Engineering and Technology. This report is submitted in partial fulfilment of the requirement for award of Bachelor of Technology in Computer Science Engineering by CMR University, Bangalore during the academic year 2022-2023. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

Place: Bangalore SATYAM RAI

Date: 21BBTCS205