



PROJECT REPORT
PROTOTYPE OF AUTOMATION
PARKING SYSTEM WITH ARDUINO

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APPROVAL AND RATIFICATION PAGE

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PROTOTYPE OF AUTOMATION PARKING SYSTEM WITH ARDUINO

by


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This project report has been approved and ratified by Faculty of Computer
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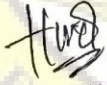
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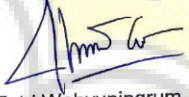
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STATEMENT OF ORIGINALITY

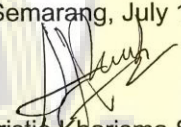
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ABSTRACT

Prototype of Automation Parking System with Arduino

This project is an automation system to control parking area. This uses Arduino, infrared sensors, and light sensor. This system is useful to monitor and calculate vehicle coming into the parking lot.

Arduino is used for reading data captured by infrared sensor and light dependent resistor sensor. The ethernet shield Winzet 5100 is used for connecting arduino to the computer with apache and MySQL. There are two infrared sensors: one is mounted at the entrance gate that used to detect vehicles come in and the other is mounted on the exit gate that used to detect vehicles come out. Then, there are three light sensors which is located in the three parking slots to detect parking vehicles. Data from infrared sensor and light sensors are sent to MySQL database on the computer.

Because this is just a prototype, in order to be useful in real life will require many changes. Changes made to the sensor is mounted on the gate, probably could use a metal sensor to detect metal material and some more sophisticated database applications for the better.

Keywords: *Arduino Uno, Infrared, Light Sensor, Automation, Database*

PREFACE

This is a prototype of automation parking system with arduino. This system serves to monitor and measure activity in the parking area. This is a summary of the discussion of each chapter from chapter one to chapter six.

First chapter is about the background of the parking automation system using the Arduino. In second chapter the writer describes functions of the Arduino, ethernet shield, infrared sensors, and light sensor. In third chapter contains of projects time management table. In fourth chapter, the writer makes an analysis for project design and the schematic of Arduino, infrared sensor, and light sensor. In fifth chapter, the writer makes an implementation of the project with sensors and testing the projects. In chapter sixth, the writer makes a conclusions of the project, so that the project can be better.

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