Bahria University
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FINAL YEAR PROJECT REPORT

BAHRIA SMART CAR PARKING MANAGEMENT SYSTEM

In fulfillment of the requirement
For degree of
BS (COMPUTER SCIENCES)

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ABSTRACT

The main objective of our project is to create and develop a system which will guide drivers in parking via android application. This report consists of different stages of chapters involving Problem that drivers face during parking and their solutions. Hence, this project proposes the smart parking system using wireless sensor network based on Arduino Uno.

The aim of this project is to atomize the car park for allowing the cars into the park. LCD is provided to display the information about the total number of cars that can be parked and the place free for parking. RFID reader is used in this project to identify the entry or exit of the cars. Whenever the main are switched on, the LCD displays the message parking space for 4 vehicles. Whenever a car comes in front of the sensor, they will then send signal to the microcontroller but in case if they get disturbed and the microcontroller will display the result of available slots on LCD. This project uses WSN technology which has a great potential towards providing an easy and cost effective solution to this credible application for various reasons. Ease of deployment in existing parking lots without excavation and expensive cable installations has increased our attention towards wireless sensor network technology.

As conclusion, this project will help reduce traffic jams and improper parking in the parking spaces in the future.

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