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# MAJOR PROJECT REPORT

ON

## AUTOMATIC ELECTRONIC BUS FARE SYSTEM

*Submitted To*

**Jawaharlal Nehru Technological University, Hyderabad**

*in partial fulfilment of the requirements for the award of Degree of*

## BACHELOR OF TECHNOLOGY

in

## ELECTRONICS AND COMMUNICATION ENGINEERING

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**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

**SUMATHI REDDY INSTITUTE OF TECHNOLOGY for WOMEN**

*(Approved by AICTE, New Delhi; Affiliated to JNTU, Hyderabad)*

Ananthasagar(Vill), Hasanparthy(M), Warangal – 506 371 (T.S.), Website : [www.sritw.org](http://www.sritw.org)

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## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING




### CERTIFICATE


This is to Certify that the Project Entitled "AUTOMATIC ELECTRONIC BUC  
FARE SYSTEM" is submitted by R.TEJASRI (196Y1A0477), N.PRASANNA  
(196Y1A0472), G.KOTESHWARI (186Y1A0432), **A.SAIUJWALA (206Y5A0403)** in the  
partial fulfillment of requirement for the award of degree of Bachelor of Technology in  
Electronics And Communication Engineering During academic year 2022-23.

  
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## ABSTRACT

The objective of this project is to issue collect money and issues ticket to each passenger. It will take a lot of time as well as create manual error. To overcome this problem, a new system is proposed. In this proposed system, Smart card used here is anRFID. This is user friendly system, which will automatically identify the passenger and deduct the passenger's fare according to the distance travelled.

A message will be sent to the concerned persons mobile with well security system. The security system is provided with the help of GSM modem.

IR sensor is used to count the number of persons entering and exiting the bus. The Public transport system is a major source of income in developing countries like India. But, this public transport system faces several problems. The conductor will face various problems in issuing the tickets. But, this new system will provide the tickets automatically deduct the fare for the distance travelled from the passenger's account.

It is also used for passenger's identification. RFID has been an emerging technology in recent years. RFID technology can be effectively employed in number of applications due to its penchant for efficiency. As for its application, it's been a widespread tool for both tracking the transit transports. A fundamental system of RFID consists of two primary components: The reader circuit and tag, details of which are discussed later. The main idea behind this project is to collect the fare automatically using the RFID technology and GSM modem



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