

## **Automatic ETM Limiter**

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**Abstract:**Automatic ETM(electronic ticketing machine) limiter is a device which performs as a safety tool for all passengers travelling in buses.It allots ticktes to travellers in a limited manner according to program given.the main aim of this research is to overcome accidents due to over crowd in buses and to make a successful journey to all passengers.

**Keywords:** IJITPM, UAE

### **1. INTRODUCTION**

Automatic ETM limiter is a ticketing machine which gives limited tickets to passengers travelling from source to destination in a comfortable manner. Internet of things(IOT)is the main thing used to this research and raspberry pi is used as an interfacing kit to write program.This program needs passengers information from where to where they are travelling ,number of stops through which bus travells, allocation of seats by considering passengers getting and leaving bus and travelling cost .By considering all these factors we have a program using user friendly language.This Research helps to make our journey safe and successful.

### **2. WORKING:**

The working of this etm limiter initially takes passengers information from source to destination and gives a ticket with appropriate cost.It allots seats

in a limited manner which does not over crowd the bus.If passengers reach their destination it automatically shows an empty slot and there is a chance to get another passenger to travel.If more number of passengers are trying to travel it does not give tickets to those travellers and it displays “you guys are not allowed to travel”.Like this ETM machine displays number of stops to which passengers are travelling and give cost to each ticket if any extra passengers are getting to bus it stops giving tickets and displays there are no empty seats.

### **3. CONCLUSION:**

Using this research a passenger can travel anywhere comfortably and safely.It reduces accidents occurred due to unlimited passengers travelling on buses.Finally, this automatic ETM limiter makes a successful and accident free travelling.