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# **Automatic Fare Debit Machine**

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Abstract: Traveling with public transport is one the key feature for government to make their state publicity and attract tourist and one of the cheapest of transportation for the citizen in that country or region so to make the facility easy that what are going through so we are with our project of "Automatic fare debit machine" system. As we are traveling with public transport like bus, train etc. Especially traveling with bus, we face a main problem for fare debiting or fare deduction and because which our "laalpari" face the loss which is never recovered and because of which see didn't get their salary on time and it is not the fair salary as other government servant. And due to which we came to know about a lot of death of many employees of M.S.R.T.C. With our project we can overcome the loses and make the traveling for the passenger flexible and more enjoyable so that they can travel and enjoy their ride and with this we can also overcome the loses and make the public transportation profitable and avoid suicide of employees due to salary issue.

Keywords: Fare, Debit, QR System, Interface

#### I. INTRODUCTION

The main purpose of this project is to ensure drivers safety through a modified handbrake in car. A handbrake is an additional braking mechanism installed on all commercial vehicles that's completely separate from foot pedal operated In cars the parking brake, also called hand brake, emergency brake, or brake, is a latching brake, usually used to keep the vehicle stationary. Most commonly used to prevent the vehicle from rolling when it is parked. Automobile hand brakes consist of a cable directly connected to the brake mechanism on one end and to a lever at the driver's position. Using your handbrake to stop a moving car can damage the brake system. Pneumatics is a section of technology that deals with the study and application of pressurized gas to produce mechanical motion.



Pneumatic systems that are used extensively in industry and factories are commonly plumbed with compressed air or compressed inert gases. This is because a centrally located and electrically powered compressor, that powers cylinders and other pneumatic devices through solenoid valves, can often provide motive power in a cheaper, safer, more flexible, and more reliable way than a large number of electric motors and actuators. Pneumatics also has applications in dentistry, construction, mining, and other areas. Welding, superior insulating qualities and design versatility. Simplicity of design and control - Machines are easily designed using standard cylinders and other components, and operate via simple onoff control. Reliability- Pneumatic systems generally have long operating lives and require little maintenance. Because gas is compressible, Equipment is less subject to shock damage. Gas <u>absorbs</u> excessive force,

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whereas fluid in hydraulics directly transfers force. Compressed gas can be stored, so machines still run for a while if electrical power is lost.

- 1. Proposed Methodology 1: Basic Information & Literature survey. This project report discusses about how to use literature data & identify the problems from field. By studying the literature of previously available system that help in maximizing the output by minimizing the effort, cost, time & money in future develop new machine.
- 2. Proposed Methodology 2: Identify & Design of system Components Available in Market. This project work will first introduce the background of the study. Presents the design constraints that influence on the use, efficiency & benefits their impacts on machine. After that machine parts design all different existing machine assembly units will done to make a probable machine model.
- 3. Proposed Methodology 3: Selection of Components for system as per design specifications. We will discuss the construction & working of system components. Various resources and factors were considered for getting the information on the project: First, the requirement of the field is to identify. The specification of the material is thought according to the need. Then, the allocation of budget is taken into consideration. Different research papers were read, we visited many markets & fields. Guidance was taken from college staff regarding the initial research of project. The Resources/Consumable required are: The main components of machine are to be purchase.
- 4. Proposed Methodology 4: Now to overcome on fare debit issue, we will be using QR Coding system for deduction of money. That system will be started by developing QR system using various languages like JavaScript, HTML, etc. And after all research and guidance from guide will be building an interface for our project and will be testing.
- 5. Proposed Methodology 5: Assembly & Testing of system. Finally, after complete manufacturing procedure, will test the working model which will satisfy probable objectives or not. After that complete working & satisfied testing will discuss advantages & applications of the machine while performing satisfied operation with complete report writing.

#### **II. CONCLUSION**

An automatic fare collection system (also known as an AFS) is a transit ticketing system and fare enforcement system that automatically calculates the entry and exit fares for each rider, usually through electronic gates. By entering the correct concession and adult/child fare on a ticket, the AFS manages to calculate whether or not riders are eligible to purchase that particular ticket before they get through the gate. The fare collection problem has been eliminated Moreover; the project phase is completed successfully by using smart card. This project is made with pre-planning, that it provides flexibility in operation. This innovation has made more desirable and economical. This project "AUTOMATIC FARE COLLECTION SYSTEM USING QR SYSTEM" is designed with the hope that it is very much economical and helpful for passengers.

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