

# CHAPTER 1

## INTRODUCTION

Our planet earth comprises nearly 9.4% of forest among the total land surface. After the emergence of industrial revolution consumption of papers increasing day by day, which intern affect the cut down of these small forest resources in geometric manner , which adversely effect on our echo system. In this domestic society most of the systems such as railway, buses, theatres, etc. utilize paper resources for issuing tickets, which will consume nearly 1,800tons of paper worldwide every day. To overcome this drawback we are coming through an idea which is a pure blend of hardware and software called “Green Ticket”. This idea is implemented using the combination of biometric technology as well as organized database management.

### 1.1 Overview

A significant proportion of the urban population depends on public transport for their daily commute. The use of paper tickets in public transport is a prevalent practice. However, this system has its own drawbacks; the entire responsibility of distributing the tickets and handling money transactions is that of the ticket distributor. Further, paper used for tickets come from felling of large number of trees. This motivates the design of an eco-friendly ticketing system. The rapid growth of technology has enabled its ability to give solutions to many problems that the society faces every day. While it is true that technology has aided humans in countless ways, there are many areas where traditional and inefficient systems are still prevalent. This gives scope to make a change for these areas, in order to capacitate better and more efficient systems. The main aim of green ticket is to preserve depleting natural resources. One of the valuable resource is trees. Paper, which is derived from trees, is used for many purposes. In public transport, paper tickets are used to authenticate that a passenger has paid the appropriate fare. Two-thirds of the population use public transport for their daily life. This overwhelming statistic reveals that the amount of paper required is very large. The proposed system here eliminates the need for paper based tickets in public transport and hence reduces the felling of trees and aids in the protection of the environment more over it is a secure and easy method of ticketing. Apart from this, the proposed method also concentrates on providing a fool proof ticketing system to avoid the piracy of passes and reduce the loss incurred by the government/agency. Also, ticket distributors are relieved from distributing

tickets to the passengers, exchange and maintaining a record of the ticket sold in a datasheet frequently.

## 1.2 Objectives

In this era our usage of papers is increasing day by day. In case of using the papers we need its resources such as trees. So intern effecting the cut down of the forests. While there are loss of financial aspects in government and private sectors for avoiding proper ticketing system. To overcome all these drawbacks we came with the project called “**GREEN TICKET**”. The proposed method concentrates on providing a ticketing system to avoid the piracy of passes and reduce the loss incurred by the government/agency. It reduces the overhead of conductor from distributing tickets to the passengers, exchange and maintaining a record of the ticket sold in a datasheet frequently.

## 1.3 Facts about environment change

As the globe’s temperature rises and the earth’s weather patterns go haywire, environment is quickly becoming a hot topic in globe. Floods are sweeping through new areas, while others are drying out faster than ever. Moreover we are cutting down the trees day by day and the planet is warming, from North Pole to South Pole, and everywhere in between. Globally, the mercury is already up more than 1 degree Fahrenheit (0.8 degree Celsius), and even more in sensitive Polar Regions. And the effects of rising temperatures aren’t waiting for some far-flung future. They’re happening right now. Signs are appearing all over, and some of them are surprising. The heat is not only melting glaciers and sea ice, it’s also shifting precipitation patterns and setting animals on the move. Some impacts from increasing temperatures are already happening.

- Ice is melting worldwide, especially at the Earth’s poles. This includes mountain glaciers, ice sheets covering West Antarctica and Greenland, and Arctic sea ice.
- Researcher Bill Fraser has tracked the decline of the Adélie penguins on Antarctica, where their numbers have fallen from 32,000 breeding pairs to 11,000 in 30 years.
- Precipitation (rain and snowfall) has increased across the globe, on average.

- Spruce bark beetles have boomed in Alaska thanks to 20 years of warm summers. The insects have chewed up 4 million acres of spruce trees.
- Other effects could happen later this century, if warming continues.
- Hurricanes and other storms are likely to become stronger but to reduce this natural calamity
- Shortage of forests causes floods and droughts will become more common. Rainfall in Ethiopia, where droughts are already common, could decline by 10 percent over the next 50 years.
- Ecosystems will change—some species will move farther north or become more successful; others won't be able to move and could become extinct. Wildlife research scientist Martyn Obbard has found that since the mid-1980s, with less ice on which to live and fish for food, polar bears have gotten considerably skinnier. Polar bear biologist Ian Stirling has found a similar pattern in Hudson Bay. He fears that if sea ice disappears, the polar bears will as well.

All the problem stated above is due to shortage of trees. Tree is one of the most important resource that can affect the world environment to an extreme extent. So to save the world we need to make the world greener with trees by reducing the use of three in our daily life.

### **1.4 Problem statements**

Country like India, Bangladesh, Srilanka etc. where population growing in a fast rate and the communication from one place to another is much frequent than any other places, faces different problems for ticketing system in transport area. In public transport, paper tickets are used to authenticate that a traveler has paid the appropriate fare. Two-thirds of the population use public transport for their daily commute. Thus it requires a huge amount of paper to accomplish the daily ticket consumption. The main source of papers is nothing but tree and this is another cause of deforestation. More over due to proper maintenance lots of passengers won't give proper fair, passengers will make long journey without paying proper fare. Conductor also won't verify the passengers properly. This all things causes a huge loss of finance for the government. To recover

all this problem we proposed a system which will reduce the use of papers and make a proper authentication also make a flexible way of ticketing system for both conductor and passengers.

### **1.5 Scope of project**

This project is concentrated to reduce the usage of papers and save the tree across the globe. We all know tree have an important role in environment, usage of papers reduce this natural resource thus affects in environment. So the scope of the project starts from bottom of life. The major problems like maintaining the passengers identification, avoid reuse of ticket and passes are overcome. It will reduce the loss of government in transportation area which will make a great affect in economy of a country.

### **1.6 Organization of report**

This report contains totally 11 chapters. First chapter contains the introduction, overview, problem we are facing and scope of the project. Second chapter contain the literature survey of the project and the problem facing due to water loss. Third chapter contain the existing system and the proposed system. Chapter four contains the system design how it is implemented. Chapter five contain what all hardware and software we used to implement the project with their specification. Chapter six contain the system skids that is nothing but the system modules. Chapter seven have the functionality of work and flowcharts. Chapter eight includes the testing part. Chapter nine contains the results and snapshots. Chapter ten contains application of the project and chapter eleven have the conclusion part of the project.