**APPENDIX 1**

**RAILWAYRESERVATIONSYSTEM**

PROJECT REPORT ***by***

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**Department of Intelligent Systems - I**

**School of Computer Science Engineering**

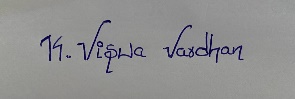
**Lovely Professional University**

**Jalandhar, Punjab**

December - 2022

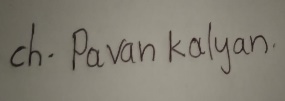
**APPENDIX 2**

# **Student Declaration**

This is to declare that this report has been written by me/us. No part of the report is copied from other sources. All information included from other sources has been duly acknowledged. I/We aver that if any part of the report is found to be copied, I/we are shall take full responsibility for it.

# Signature

Student 1

Roll number: 41

Signature

Student 2

Roll number: 49

Place : Jalandhar, Punjab

Date : 12/12/2022

**APPENDIX 3**

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**APPENDIX 4**

BONAFIDE CERTIFICATE

Certified that this project report “INDIAN RAILWAY REVERSATION” is the bonafide work of” Kandula viswa Vardhan, Chennu pavan kalyan”

Who carried out the project work under my supervision.

**Bhupinder Singh**

Assistant Professor

ID: 28636

Department of Intelligent

Systems -I

**Chapter-1**

**Introduction:**

**HTML** stands for Hypertext Markup Language. It was created by Tim Berners-Lee in 1991. The first version of HTML is HTML 2.0 which was published in 1999, and the latest version is HTML 5. We can save HTML files with an extension .html. It is the most basic language, and simple to learn and modify.

It contains the elements that can change/develop a web page’s look and the displayed contents. Or we can say that HTML creates or defines the structure of web pages. We can create websites using HTML which can be viewed on internet-connected devices like laptops, android mobile phones, etc. It is a combination of both hypertext and markup language.

Text that is not restricted to a sequential format and that includes links to other text is called Hypertext. The links can connect online pages inside a single or different website.

Markup Language is a language that is interpreted by the browser and it defines the elements within a document using “tags”. It is human-readable, which means that markup files use common words rather than the complicated syntax of programming languages.

HTML is the first language you should learn if you want to go for web development. HTML is a markup language that loads fast and is also light weighted. Whenever you use your browser to contact a server, you will receive a response in the form of HTML and CSS. Many tags are supported by HTML, making your web page more appealing and recognizable. HTML5 has recently incorporated new tags and elements to aid in the development of professional-looking web pages.

Applications of HTML:

HTML is used for various purposes. Let us take a look at them

* Web Pages Development
* Embedding Images and Videos
* Game development
* Data entry support
* Store Things On The Client-Side

**CSS** stands for Cascading Style Sheets, is a simple design language intended to simplify the process of making web pages presentable. Using CSS, you can control the color of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, what background images or colors are used, as well as a variety of other effects.

CSS handles the look and feel part of a web page. CSS is easy to learn and understand but it provides a powerful control over the presentation of an HTML document. Most commonly, CSS is combined with the markup languages HTML or XHTML.

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Advantages of CSS:

* Multiple Device Compatibility  Superior styles to HTML.
* CSS saves time
* Pages load faster
* Easy maintenance
* Global web standards

CSS is created and maintained through a group of people within the W3C called the CSS Working Group. The CSS Working Group creates documents called specifications. When a specification has been discussed and officially ratified by the W3C members, it becomes a recommendation. These ratified specifications are called recommendations because the W3C has no control over the actual implementation of the language. Independent companies and organizations create that software.

The World Wide Web Consortium or W3C is a group that makes recommendations about how the Internet works and how it should evolve.

Cascading Style Sheets level 1 (CSS1) came out of W3C as a recommendation in December 1996. This version describes the CSS language as well as a simple visual formatting model for all the HTML tags.

CSS2 became a W3C recommendation in May 1998 and builds on CSS1. This version adds support for media-specific style sheets e.g. printers and aural devices, downloadable fonts, element positioning and tables.

The motivation for making CSS was to provide a system to style the information which is being presented (At that time, this was solely lacking), and to isolate the process of styling from that of content creation. Without using CSS, it is very typical thing for web designers to lay out pages with techniques like HTML tables that obstruct accessibility for the visionimpaired users.

**JavaScript** is a lightweight, cross-platform, and interpreted compiled programming language which is also known as the scripting language for webpages. It is well-known for the development of web pages; many non-browser environments also use it. JavaScript is both imperative and declarative type of language. JavaScript contains a standard library elements of objects, like [Array](https://www.geeksforgeeks.org/arrays-in-javascript/), [Date](https://www.geeksforgeeks.org/javascript-date-objects/), and [Math,](https://www.geeksforgeeks.org/javascript-math-object/) and a core set of language like [operators,](https://www.geeksforgeeks.org/javascript-operators/) control structures, and [statements.](https://www.geeksforgeeks.org/javascript-statements/) JavaScript is also being used widely in game development and [Mobile](https://www.guru99.com/mobile-testing.html) application development.

JavaScript was developed by Brendan Eich in 1995, which appeared in Netscape, a popular browser of that time. The language was initially called LiveScript and was later renamed

JavaScript.

Being a scripting language, JavaScript cannot run on its own. In fact, the browser is responsible for running JavaScript code. When a user requests an HTML page with JavaScript in it, the script is sent to the browser and it is up to the browser to execute it. The main advantage of JavaScript is that all modern web browsers support JavaScript. So, you do not have to worry about whether your site visitor uses Internet Explorer, Google Chrome, Firefox or any other browser.

To start with, you need a text editor to write your code and a browser to display the web pages you develop. You can use a text editor of your choice including Notepad++, Visual Studio Code, Sublime Text, Atom or any other text editor you are comfortable with.

There are many programmers who think that JavaScript and [Java](https://www.guru99.com/java-tutorial.html) [a](https://www.guru99.com/java-tutorial.html)re the same. In fact, **Java is a very complex programming language whereas JavaScript is only a scripting language.** The syntax of JavaScript is mostly influenced by the programming language C.

Advantages of JavaScript:

* Reduce the time
* Provides various interfaces
* Capable of front-end as well as back-end development
* Reduces code length
* Works perfect with other programming languages
* Data validation is possible on the browser itself rather than sending it off to the server

**Bootstrap** is an open-source and free CSS framework that helps in directing a responsive device-friendly mobile-first front-end webpage development tool. This tutorial series will teach you about Bootstrap and its various features.

Bootstrap mainly includes CSS (Cascading Style Sheets) and an optional JavaScriptsupported design template (plug-ins) that deals with typography, buttons, forms, and other user interface components. This Bootstrap framework helps rapid web development and supports developers in creating responsive web pages.

Twitter Blueprint was the first name for Bootstrap and was developed on Twitter by Mr.

Mark Otto and Jacob Thornton. It was released as an open-source product on GitHub in August 2011. The framework is primarily built to encourage design uniformity and reliability of web pages across applications. Before its existence, developers used various external libraries to perform responsive web development, leading to incompatibilities in web development and heavy maintenance burdens. Advantages of Bootstrap:

* Responsive design and looks
* Easy customization
* Faster and Easier Web Development
* Simple and easy to start
* Clean interface or Developers

Bootstrap Features:

* HTML and CSS based design templates for forms, buttons, navigation, and other components.
* Modularity. Change or remove components or component colors.
* Re-usable code with CSS classes.
* Out of the box JavaScript components with additional features like tooltips, modal windows, etc.

The use of mobile devices to surf the web continues to grow at an astronomical pace, and these devices are often constrained by display size and require a different approach to how content is laid out on the screen.

A multitude of different screen sizes exist across phones, "phablets," tablets, desktops, game consoles, TVs, and even wearables. Screen sizes are always changing, so it's important that your site can adapt to any screen size, today or in the future. In addition, devices have different features with which we interact with them. For example some of your visitors will be using a touchscreen. Modern responsive design considers all of these things to optimize the experience for everyone.

Pages optimized for a variety of devices must include a meta viewport tag in the head of the document. A meta viewport tag gives the browser instructions on how to control the page's dimensions and scaling.

To attempt to provide the best experience, mobile browsers render the page at a desktop screen width (usually about 980px, though this varies across devices), and then try to make the content look better by increasing font sizes and scaling the content to fit the screen. This means that font sizes may appear inconsistent to users, who may have to double-tap or pinchto-zoom in order to see and interact with the content.

Using the meta viewport value width=device-width instructs the page to match the screen's width in device-independent pixels. A device (or density) independent pixel being a representation of a single pixel, which may on a high density screen consist of many physical pixels. This allows the page to reflow content to match different screen sizes, whether rendered on a small mobile phone or a large desktop monitor.

**Chapter-2**

**Objectives Of Project:**

The main objective of the Railway Reservation System is to manage the details of Train,

Booking, Payment, Seat, Ticket. It manages all the information about Train, Customer, Ticket, Train. The project is totally built at administrative end and thus only the administrator is guaranteed the access. The purpose of the project is to build an application program to reduce the manual work for managing the Train, Booking, Customer, Payment. It tracks all the details about the Payment, Seat, Ticket.

* Railway Reservation System also manage the Seat details online for Customer details, Payment details, Train.

•Provides the searching facilities based on various factors. Such as Train, Booking, Customer, Payment

•It tracks all the information of Ticket, Seat, Customer etc

•Manage the information of Ticket

* Shows the information and description of the Train, Booking

•To increase efficiency of managing the Train, Ticket

•It deals with monitoring the information and transactions of Customr

•Manage the information of Train

•Editing, adding and updating of Records is improved which results in proper resource management of Train data.

* Manage the information of Customer
* It satisfy the user requirement

•Be easy to understand by the user and operator

* Be easy to operate
* Have a good user interface
* Be expandable

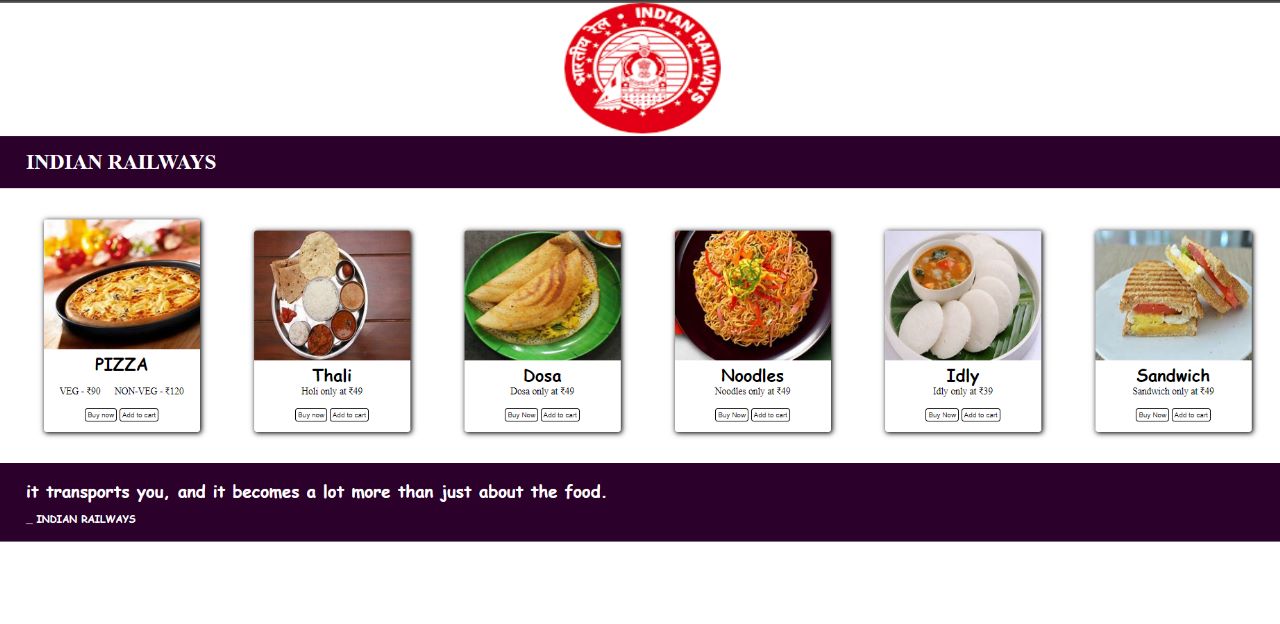
•Delivered on schedule within the budget.

**Chapter-3 Features Of Project:**

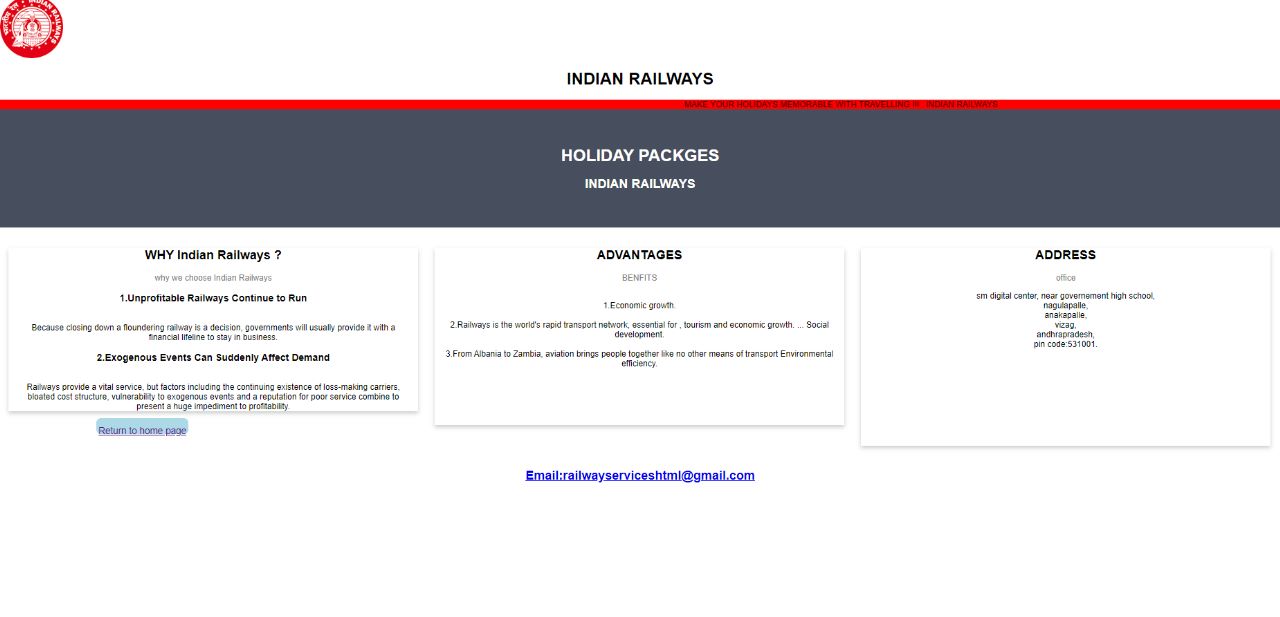
* **Provides the searching facilities based on various factors. Such as Booking, Customers, Trains, Fare**
* **The transactions are executed in off-line mode, hence on-line data for Booking, Stations capture and modification is not possible.**
* **It tracks all the information of Stations, Timetable, Trains ect**
* **Manage the information of Stations**
* **Shows the information and description of the Booking, Customers**
* **All the fields such as Booking, Customers, Fare are validated and does not take invalid values**
* **It generates the report on Booking, Stations, Timetable**
* **Provide filter reports on Customers, Trains, Fare**
* **You can easily export PDF for the Booking, Timetable, Trains**
* **Application also provides excel export for Stations, Customers, Fare**
* **You can also export the report into csv format for Booking, Stations, Fare**
* **To increase efficiency of managing the Booking, Stations**
* **It deals with monitoring the information and transactions of Trains.**
* **Manage the information of Booking**
* **Editing, adding and updating of Records is improved which results in proper resource management of Booking data.**
* **Manage the information of Trains • Integration of all records of Fare.**

**Chapter-4**

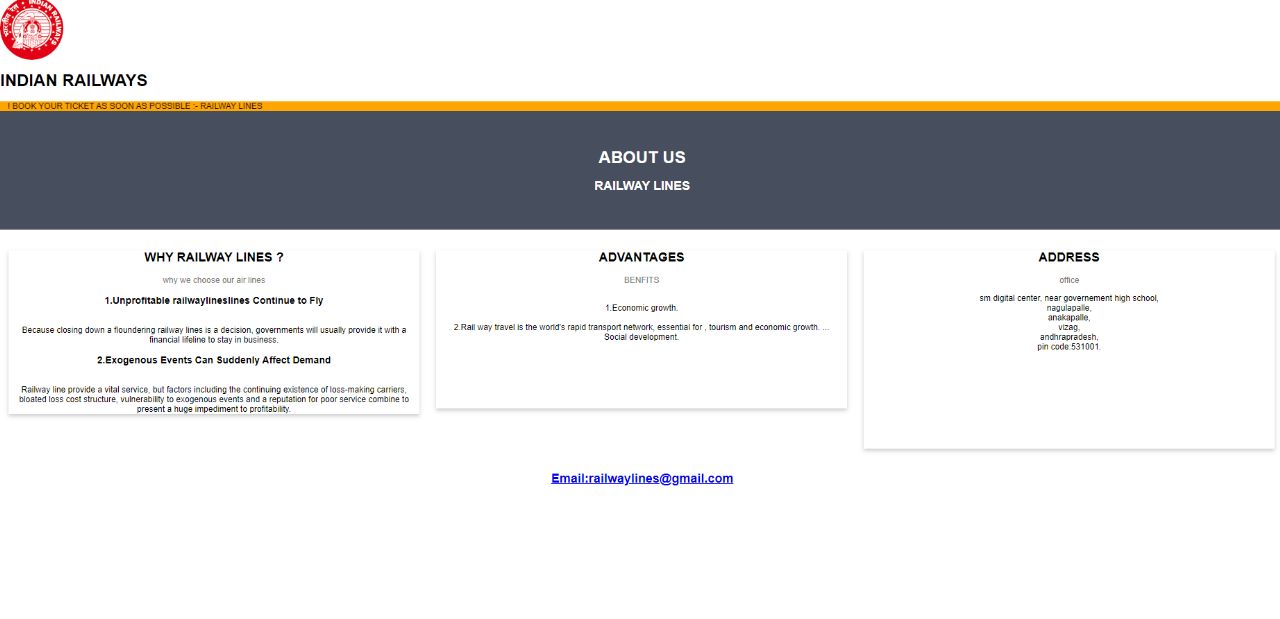
**Project Screenshots:**

**Figure 1. Shows top view of home page**

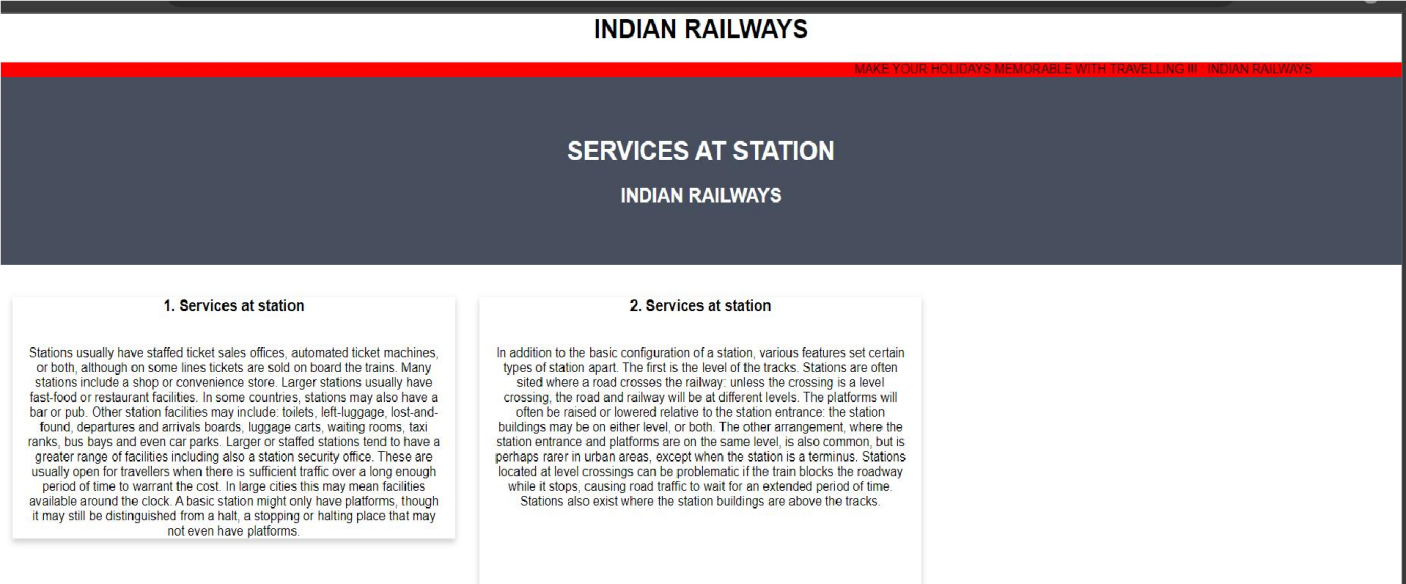
**Figure 2. Describes top view of meals page**



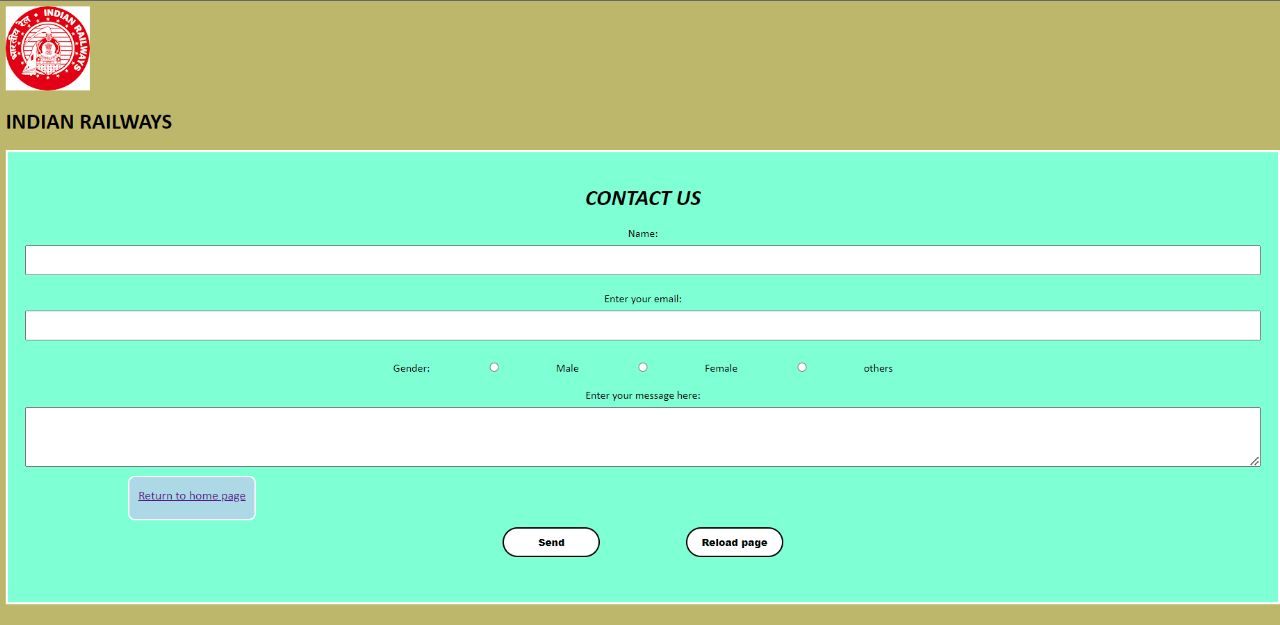
**Figure 3. Shows top view of holiday packages page**



**Figure 4. Describes view of the services at station**



**Figure 5. Describes view of the contact us**



**Chapter-5**

**Future Scope Of Project:**

Reservation Clerk is a person to create and Cancel Reservation by entering Login Password. Manager is a person who updates the Train Information by entering his own Password. The system can handle only reservation and train details efficiently and it doesn't contain other details about the railway administration. The main purpose of this system is

> Creating reservation

> Cancel reservation

> View reservation status

> View train schedule

> Generating reports

> Update train schedule

> Update reservation details

The Seats of Reservation cannot be more than the seats of Train at that date. This is a constraint that has to be followed by the Clerk when he creates the Reservation. For that purpose he wants to check the seats remaining present in the Train.

The scope of this system in creating Reservation is that, from any Railway Station we can Create Reservation, which is updated automatically in all the stations. Hence, there is no confusion to the Reservation Clerk in all the stations to create the Reservation. This can be possible by maintaining Global Database. Clerks present at different stations can access the global database and the clerks can easily understand the remaining reservation seats. It provides the ability to create reservation from different places for a train.

The system is so secured and clerk and manager utilize it. Nobody can able to access the system without his or her permission because of providing login facility to the system. The password is in the form of cipher text by using cryptography technology, so it cannot be hacked by any person. The global database can passes through network in order to utilized by managers or clerks at different places. So, we want to provide network security because of the data not hacked by the other persons when it is going through network cables. This network security is provided by the cryptography technology.