SYNOPSIS

Railway Route Optimization

MADE BY :-

MEHUL AGGARWAL   - **1805529**

NISHANT PASSI   - **1805534**

NIVEDAN SHARMA   - **1805535**

Department of Information Technology
Guru Nanak Dev Engineering College, Ludhiana

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Overview

INTRODUCTION

- Railway Route Optimization System is a product to serve to users who are tourists. The Main purpose of the project is to let the end users or passengers to know the shortest path to reach the destination with in short period and with amount as minimum as possible and as early as possible when more than one Railways route is to there to reach the destination.

- This optimization system shows the graphical representation of the train route from staring point to ending point, this is very use full in now a days to know the train details i.e. train Starting Point and Ending Point, Starting time and arrival time Charge for A Starting point to Ending Point

STATIONS MODULE

- This module Maintains the data about station and allow operations like addition, deletion, modification. This module maintains stations tables and fields are station-id, station-name, and district, state. In this table Station-id, station-name is unique does not allow any unique values.

- For arranging a route Starting station, ending station, via stations are must be registered in stations module, after registration of the stations administrator can arrange the path among that stations. This station module is handled by administrator only, can not handle end user

TRAINS MODULE

- This module maintains the data about trains and allows operations like additions, deletion, and modification. The train module handles trains table and fields are train-id, train-name, starting-station, ending station, starting-time, ending-time, train-type.

- In this train-id unique and this attribute does not allow any duplicate values

ROUTE MODULE

- This module maintains the data about routes between stations and This module handle the routes tables and fields are route-id, starting-station, destination, timetakenforordinary, and timetakenforexpress. The module shows the graphical representation of a route between starting-station and destination.

- This module is very useful to know routes between any two stations and also know shortest path among the routes, and also gives graphical representation of the corresponding routes

SEARCH MODULE

- **It consists of 2 parts**

Administrator

The administrator has privileges on Stations, Trains, and Routes he can Add data into these tables and allow all operations on these tables. Once data is stored into these tables after the traveler can send a query on that data for generating reports. And he can easily find out which is the shortest path between two stations

Traveler

The traveler has only privileges on search for a train and a route. The traveler sends queries to server and gets reports on the requested data and he will get graphical representation of the path between any two stations

APPLICATIONS

- This algorithm can also be applied in many other fields of railway applications, such as the crew scheduling, station operating plan optimization etc. Its optimization ability affords the possibility to solve the optimization problems in railway applications with high precision and efficiency. It is no doubt that this algorithm has a bright future in the field of railway applications.

- This project helps to give the end users or passengers to know the shortest path to reach the destination with in short period and with amount as minimum as possible and as early as possible when more than one Railways route is to there to reach the destination.

REFERENCES

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ACKNOWLEDGEMENT