

# **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI**



## **A MINI PROJECT REPORT ON RAILWAY MANAGEMENT SYSTEM**

**SUBMITTED BY**

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**Under the Guidance of**

**Mrs. Deeksha M**

**Sr. Assistant Professor**



**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING  
ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY  
MOODBIDRI-574225, KARNATAKA**

**2023 – 2024**

**ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY**

**MIJAR, MOODBIDRI D.K. -574225 KARNATAKA**



**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

## **CERTIFICATE**

This is to certify that, the Mini Project entitled “**Railway Management System**” for the subject code **21CSMP67** has been successfully completed and report submitted by **Akshay M (4AL22CS400)** during the academic year 2023– 2024. It is certified that all corrections/suggestions indicated presentation session have been incorporated in the report and scored 88 Marks out of 100 and deposited in the departmental library.

A handwritten signature in black ink, appearing to read "Deeksha M", is written over a horizontal line.

**Mrs. Deeksha M**

**Sr. Assistant Professor**

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This is to certify that, the Mini Project entitled “**Railway Management System**” for the subject code **21CSMP67** has been successfully completed and report submitted by **Daneshwari Sajjanar (4AL22CS403)** during the academic year 2023– 2024. It is certified that all corrections/suggestions indicated presentation session have been incorporated in the report and scored 88 Marks out of 100 and deposited in the departmental library.

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This is to certify that, the Mini Project entitled “**Railway Management System**” for the subject code **21CSMP67** has been successfully completed and report submitted by **January Shylla (4AL22CS404)** during the academic year 2023– 2024. It is certified that all corrections/suggestions indicated presentation session have been incorporated in the report and scored 88 Marks out of 100 and deposited in the departmental library.

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**Mrs. Deeksha M**

**Sr. Assistant Professor**

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**CERTIFICATE**

This is to certify that, the Mini Project entitled “**Railway Management System**” for the subject code **21CSMP67** has been successfully completed and report submitted by **Kiran Kumar K (4AL22CS405)** during the academic year 2023– 2024. It is certified that all corrections/suggestions indicated presentation session have been incorporated in the report and scored 88 Marks out of 100 and deposited in the departmental library.

**Mrs. Deeksha M**

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## ABSTRACT

This mini-project focuses on developing a Railway Management System (RSM) application to enhance operational efficiency and passenger satisfaction in railway systems. The application integrates route planning, scheduling, ticketing, and real-time monitoring functionalities. Methodologically, it follows iterative development, emphasizing robust system architecture and user-friendly interfaces. The RSM application aims to optimize resource utilization, improve service reliability, and provide real-time information to passengers and railway authorities, thereby contributing to a safer and more efficient railway transportation system. In this Railway Management System mini-project developed using Streamlit, users can authenticate securely with role-based access, ensuring appropriate permissions for tasks. The system allows for efficient management of trains, including adding, editing, and deleting train details such as schedules and routes. Stations are also managed, with features for updating facilities and services. In this minproject a simple ticketing system is enabled for booking, cancellation, and modification of tickets, integrating basic payment functionalities. Passenger management features maintain records and manifests for each train, while basic reporting and visualization tools provide insights into system analytics. Real-time notifications keep users informed about delays and updates, and an admin dashboard offers an overview of system status and configuration options for smooth operations. This mini-project aims to provide a comprehensive yet streamlined experience for managing essential aspects of a railway network using the Streamlit framework.