

Module Code: PUSL 2021	Module Name: Computing Group Project
Coursework Title: Railway Management System Project proposal	
Deadline Date: 25 October 2023	Member of staff responsible for coursework: Mr.Pramudhya Thilakarathne
Programme: Computing Group Project	
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<p>Group Details- B36</p> <p>Group Members</p> <ul style="list-style-type: none"> <li>• Group Leader – Ranasinghe Subasinghe (10900316)</li> <li>• Programming Leader – Jayalath Harshana (10898589)</li> <li>• Planning Leader – Chamath Rathnayaka (10898681)</li> <li>• Technical Leader– Dissanayaka Ranaweera (10898889)</li> <li>• Quality Leader– Wannaku Premawardana (10898673)</li> <li>• Testing Leader– Ekanayake Bandara (10899241)</li> </ul> <p><b><i>We confirm that we have read and understood the Plymouth University regulations relating to Assessment Offences and that we are aware of the possible penalties for any breach of these regulations. We confirm that this is the independent work of the group.</i></b></p> <p>Signed on behalf of the group:</p>	
<p>Individual assignment: <b><i>I confirm that I have read and understood the Plymouth University regulations relating to Assessment Offences and that I am aware of the possible penalties for any breach of these regulations. I confirm that this is my own independent work.</i></b></p> <p>Signed:</p>	
<p>Use of translation software: failure to declare that translation software or a similar writing aid has been used will be treated as an assessment offence.</p> <p>I *have used/not used translation software.</p> <p>If used, please state name of software.....</p>	

Use of translation software

We have not translation software

**Overall mark** \_\_\_\_\_%      **Assessors Initials** \_\_\_\_\_      **Date**\_\_\_\_\_

\*Please delete as appropriateSci/ps/d:/students/cwkfrontcover/2013/14

## Introduction

First of all, Presenting the rail System Mobile App, the smooth and effective rail travel experience of the future! Regardless of your travel habits—daily, occasional, or railway enthusiast—this app serves as your one-stop shop for a smooth and pleasurable train ride.

Important characteristics

- real-Time Updates:** Stay up to date with information on platform modifications, delays, and train timetables in real-time. You'll never have to wait in the dark to find out when your train is arriving and
- Purchasing Tickets:** For a paperless experience, purchase tickets with ease, verify seat availability, and even store your e-tickets directly on your phone and fare
- Information:** Provides consumers with cost-effective options by displaying ticket pricing, seat availability, and specials and mobile
- Boarding Pass:** Provides boarding passes digitally for a smooth, paperless check-in experience and
- Journey Planner:** Map out your complete travel itinerary, including stops, transfers, and projected travel times and
- Live Tracking:** Stay calm until it's time to travel to the platform by keeping track of your train's location in real-time and notifications and
- Alerts:** Get notifications about weather, service outages, and other important information
- In-App Payment:** For a seamless and cashless experience, pay for meals, tickets, and services directly through the app. Offline Mode Provides access to crucial data even in situations with spotty or non-existent internet connectivity. User Reviews allows travellers to review services, discuss experiences, and offer comments about their train travels. Loyalty programmes provide incentives and benefits to regular rail users. Emergency Contacts: Offers access to hotlines and support in the event of an emergency or interruption. Multiplatform Compatible with iOS and Android mobile platforms. Travel Advice, Provides advice, suggestions, and details on nearby sights at train stations. Accessibility we made sure the app is user-friendly for everyone by designing it with accessibility in mind.

Your ticket to a relaxed and pleasurable train ride is the Train System Mobile App. Whether you travel occasionally or on a daily basis, this app makes sure that every trip is easy, convenient, and enjoyable. Launch into a new era of exceptional train travel by downloading the app right now. We are here to ensure that your next adventure is nothing short of extraordinary! Bid farewell to the days of doubt and annoyance. Install the app right away to join the ride with assurance!

# Objectives

1. Start Point: This is where the journey starts.
2. End: Tell us about a trip you would like to take.
3. Method of Payment: Pick how you want to pay: cash, a credit or debit card, or your phone.
4. Extra Instructions: Give customer any specific information or help they need.
5. Live tracking: Live tracking lets you see where your train is right now.
6. Coupon Codes: To save money, use any coupon codes that are given out.
7. Efficient Communication: Setting up good ways for management, workers, and customers to talk to each other so that questions can be answered quickly, information can be shared, and problems can be dealt with as they come up.
8. Continuous Improvement: Making it a habit to keep getting better by regularly asking employees and customers for their thoughts, analysing the information, and using their suggestions to make the whole system better.

# Target Users

Station Managers and personnel:

In order to oversee passenger flow, conduct tickets, keep an eye on arrivals and departures, and guarantee the efficient operation of station amenities, station managers and personnel must have access to the system.

Passengers:

Another group of people who utilize the railway management system indirectly is the passenger. Through a variety of interfaces, including websites and mobile applications, they may use the system to check timetables, purchase tickets, and get updates on train statuses, delays, and other pertinent data.

Companies that manage freight:

Companies that move products via railroads would likewise be considered target users if the railway network managed freight movement as well. To handle logistics, keep an eye on shipments, and guarantee the prompt and safe delivery of goods, they would want access to the system.

# Application features and Description

A railway management application is a software programme created to make different parts of operating and maintaining a railway system easier. Usually, it provides features like:

Searching, booking, and buying tickets for train travel are all made possible by this feature.

Details about train schedules, including arrival and departure times and any possible delays, are provided by the schedule information page.

- **Seat Availability:** Allows customers to look up available seats in various sections and classes.
- **Route Planning:** Offers details on available routes, connections, and train transfers to assist users in organising their travel plans.
- **Real-time train tracking** is provided by Live Tracking, which enables users to keep track of trains and predict when they will arrive.
- **Payment Integration:** Accepts credit/debit cards, mobile wallets, and other digital payment methods in addition to other payment methods for ticket purchases.
- **Cancellation and Refunds:** This feature lets customers know about refund guidelines and lets them cancel tickets.

Details about railway stations are provided, including information on the facilities, services, and amenities that are offered.

**Alerts and Notifications:** Provides users with information about their scheduled trips, including any delays or schedule modifications.

**Reviews and comments:** Offers a forum for customers to share their thoughts about their trip, which can be utilised to enhance offerings.

**Special Services:** Provides details on reserved seating, accessible options, and other special services.

**Integration with Other Transportation Modes:** To offer a smooth travel experience, some apps may integrate with other modes of transportation like buses or taxis.

In general, the goal of a railway management app is to improve user experience by offering easy access to train-related information and services.

## Time Frame

PROJECT NAME	PROJECT DURATION	PROJECT START DATE
Train system mobile application	5 MONTHS	Oct 23,2023

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