

# Dhaka Metro Rail Ticket System

Web-Based Ticket Booking Application

**Prepared By:** Md. Khalid Hasan

**Role:** Full Stack Developer

**Technology:** Java (JSP), MySQL, HTML, CSS

**Date:** March 2026

## Project Overview

The Dhaka Metro Rail Ticket System is a web-based application that allows users to register, login, and book metro tickets online. The system also includes an admin panel to manage ticket data.

## Objectives

- Develop an online metro ticket booking system
- Implement secure user authentication
- Provide admin dashboard

## Features

- User Registration & Login
- Ticket Booking System
- Fare Calculation
- Payment (bKash/Nagad)
- Ticket Generation
- Booking History
- Admin Dashboard

## System Flow

User → Register/Login → Dashboard → Book Ticket → Payment → Ticket Generated  
→ View History

## Technology Used

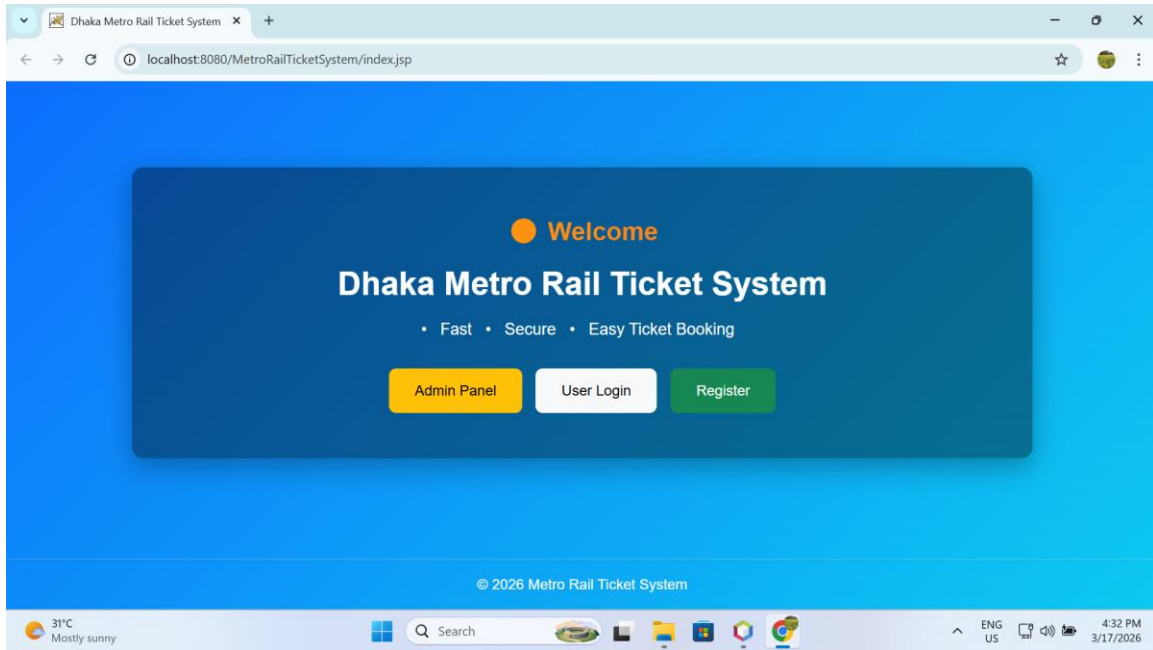
**Frontend:** HTML, CSS

**Backend:** Java (JSP, Servlet)

**Database:** MySQL

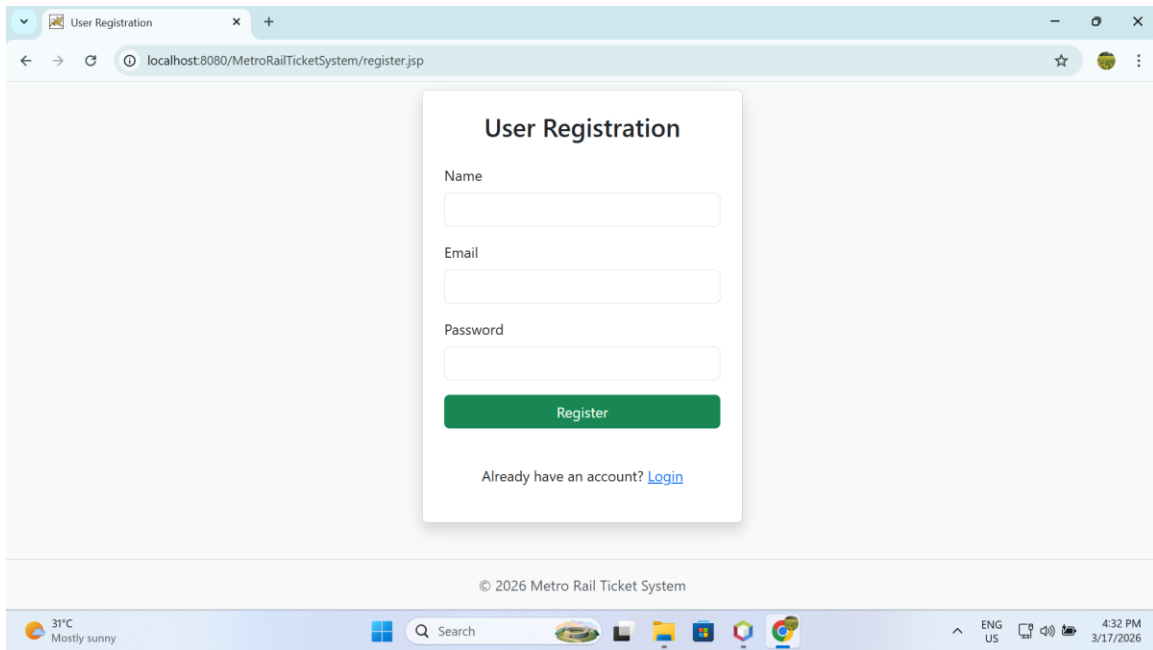
**Server:** Apache Tomcat

**Figure 1: Home Page**



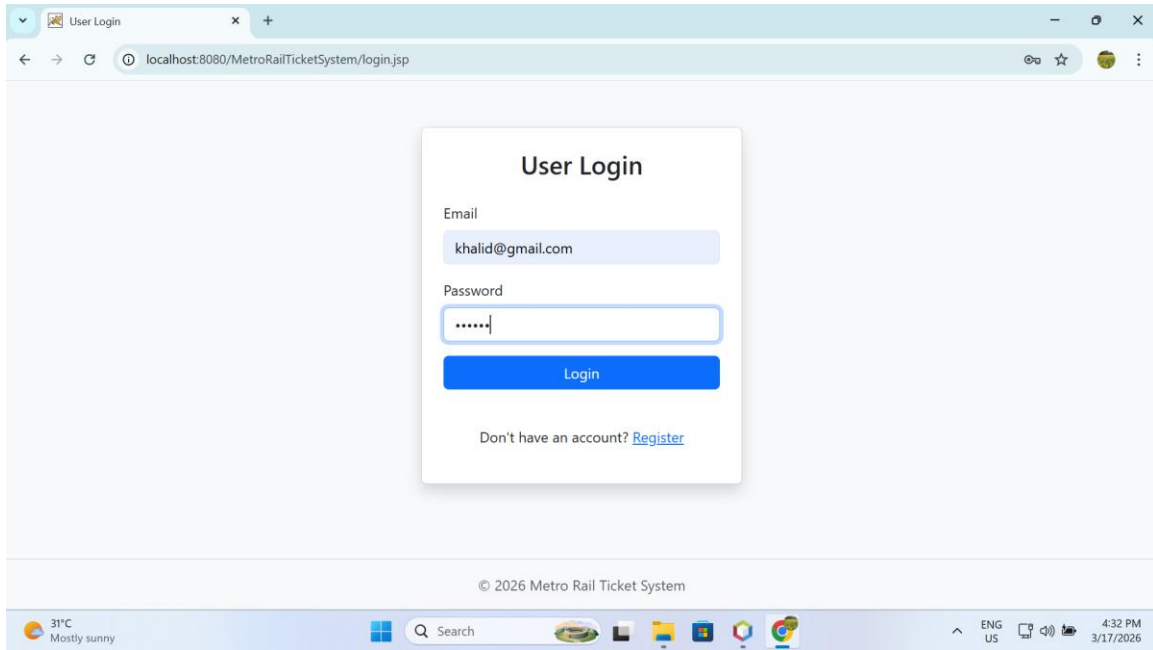
The homepage provides options for Admin Panel, User Login, and Registration.

**Figure 2: User Registration Page**



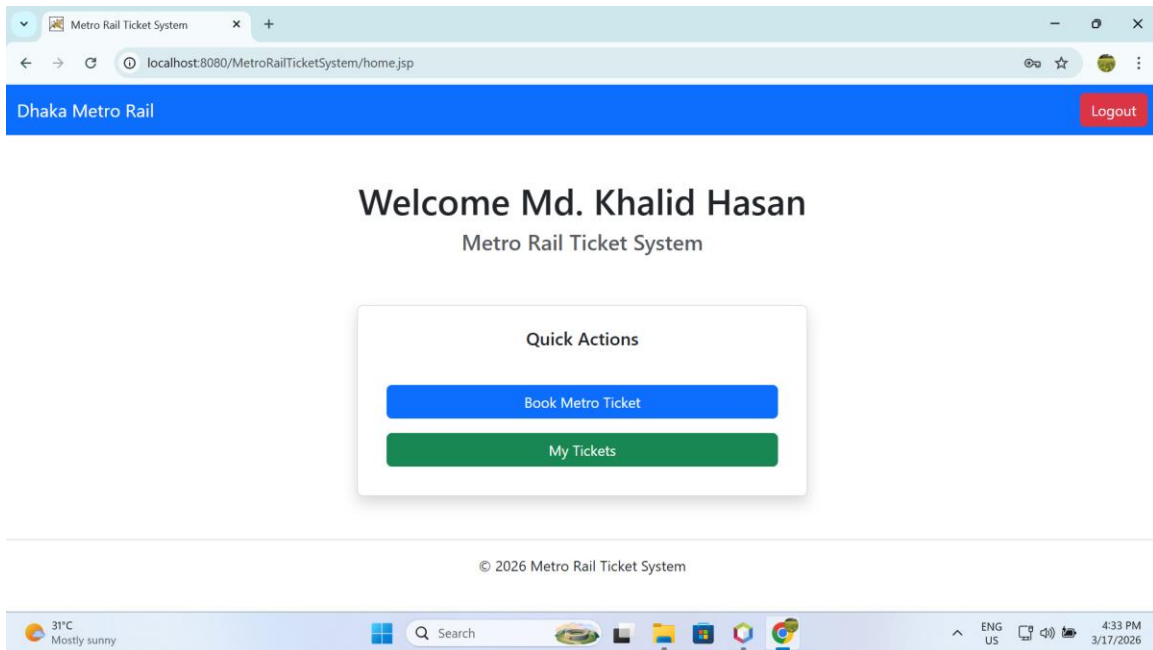
New users can create an account by providing name, email, and password.

**Figure 3: User Login Page**



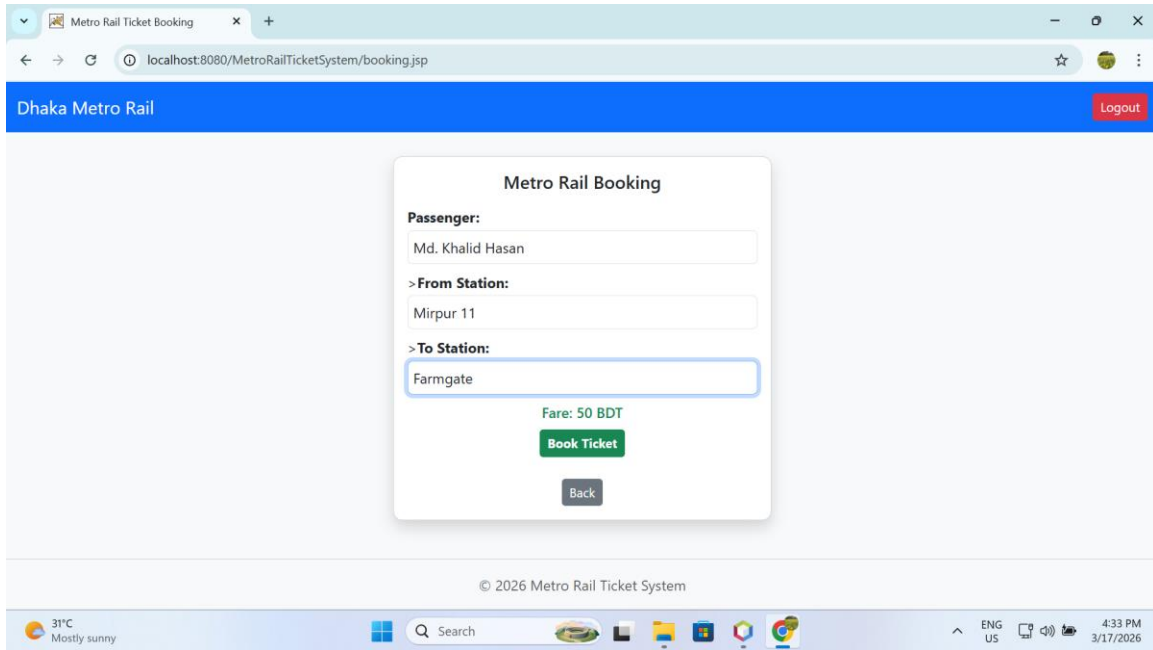
Registered users can login using their email and password.

**Figure 4: User Dashboard**



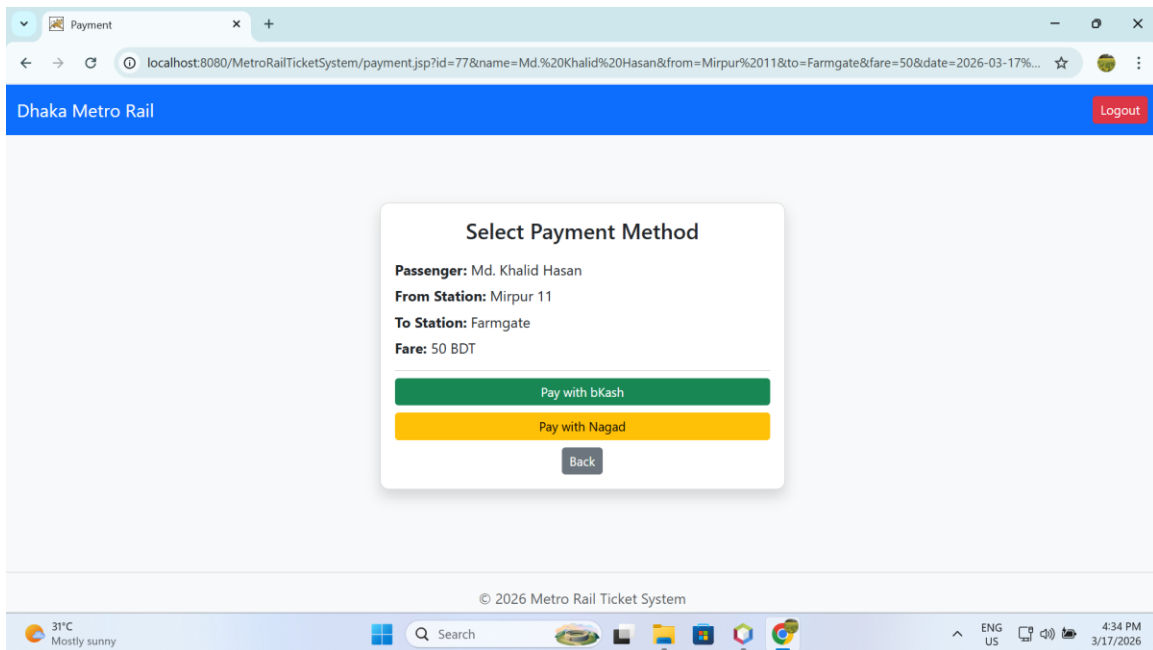
After login, users can access quick actions like booking tickets or viewing ticket history.

**Figure 5: Ticket Booking Page**



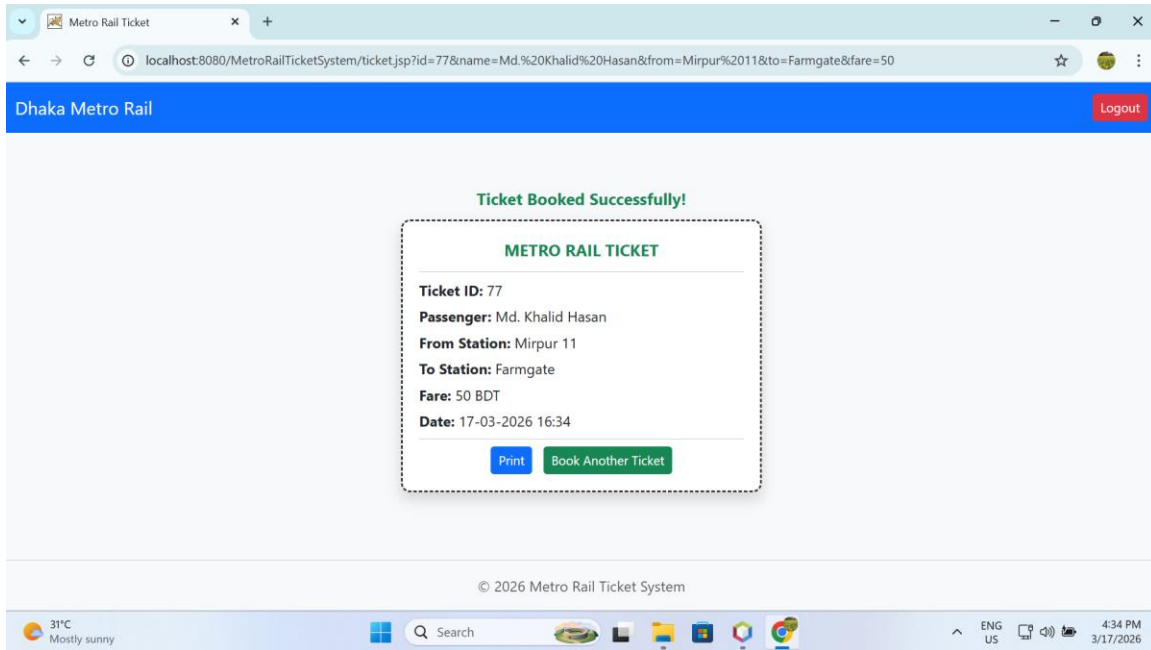
Users can select departure and destination stations. The system automatically calculates fare.

**Figure 6: Payment Page**



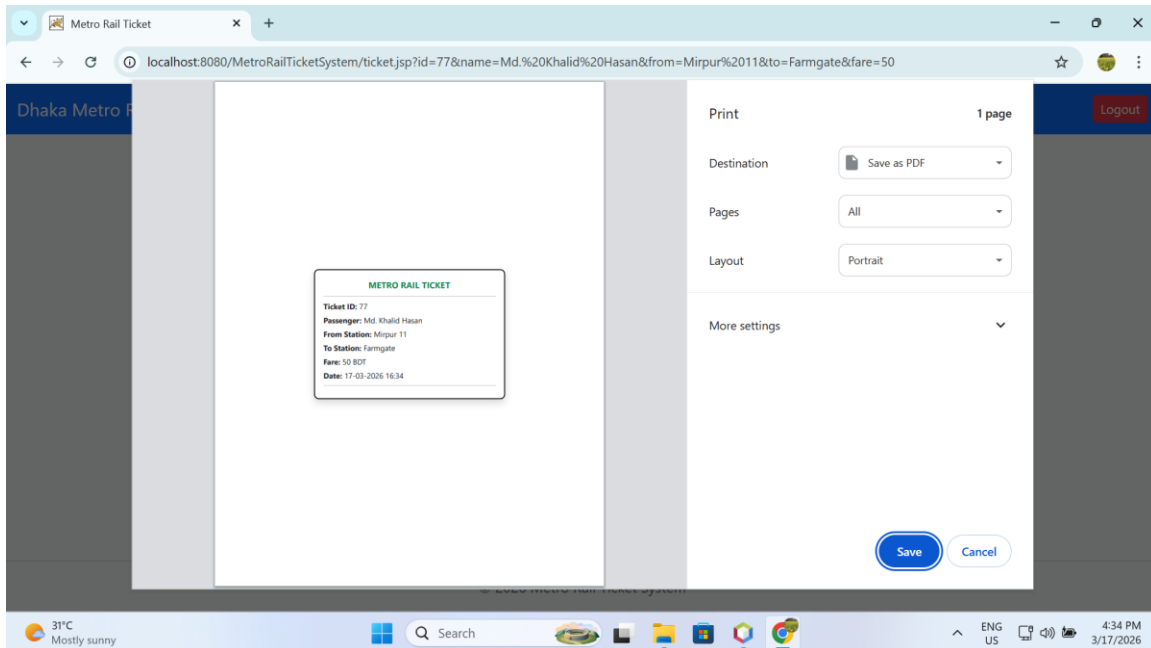
Users can choose payment methods such as bKash or Nagad.

## Figure 7: Ticket Confirmation



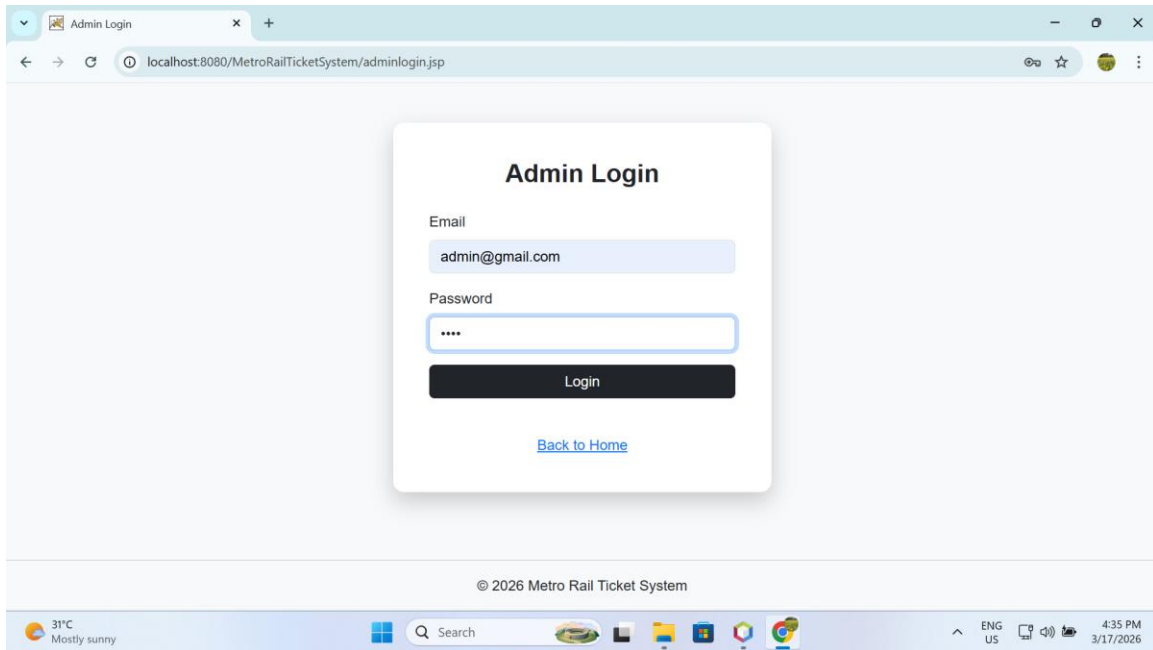
After successful payment, the system generates a ticket with all details.

## Figure 8: Ticket PDF Print



Users can print and save their booked ticket as a PDF directly from the system.

## Figure 9: Admin Login Page



Admin can login using admin credentials.

## Figure 10: Admin Dashboard

Dhaka Metro Rail Admin Panel [Logout](#)

### Admin Dashboard

Date: 17 March 2026

Total Tickets Sold: 77

ID	Passenger	From	To	Fare
1	Md. Khalid Hasan	Uttara South	Mirpur 11	60
2	Didar	Uttara Center	Mirpur 11	60
3	Md. Khalid Hasan	Mirpur 11	Mirpur 10	10
4	Md. Khalid Hasan	Mirpur 11	Dhaka University	80
5	Siam	Mirpur 11	Motijheel	100
6	Md. Khalid Hasan	Uttara North	Uttara North	0

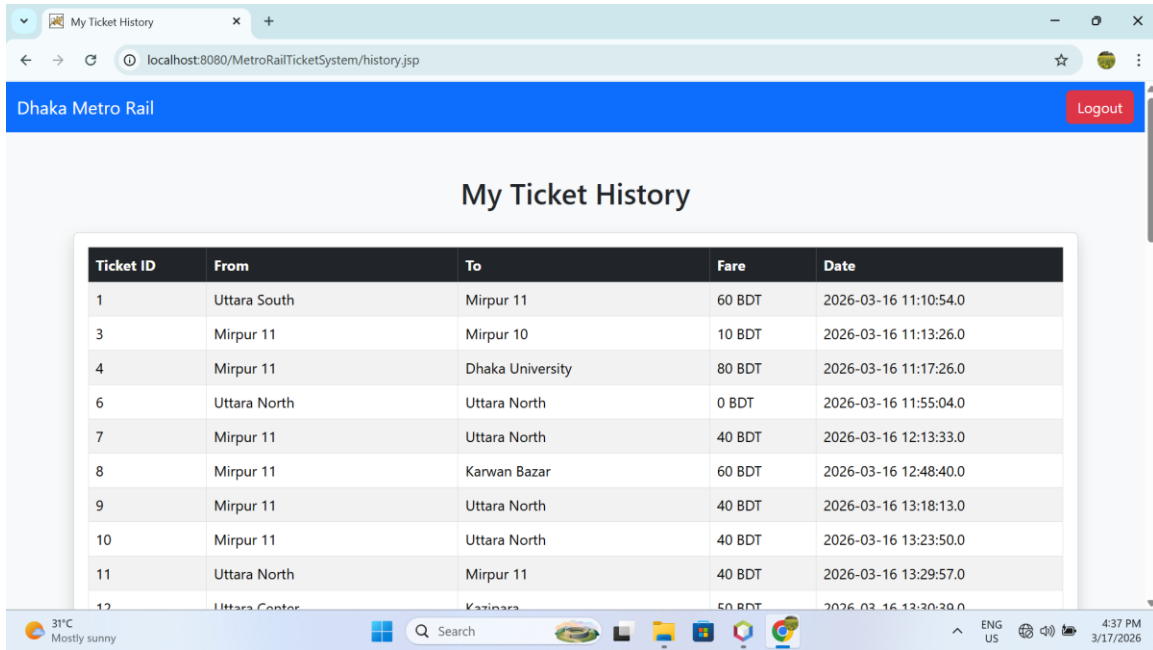
31°C Mostly sunny

Search

ENG US 4:35 PM 3/17/2026

Admin can view total tickets sold and manage ticket data.

**Figure 11: Ticket History Page**



Users can view their previous bookings and ticket details.

## **Database Overview**

The system uses MySQL database. Main tables include Users, Tickets, and Booking Records.

## **Challenges & Solutions**

Handled session management, database connectivity, and dynamic fare calculation.

## **Future Improvements**

- Mobile app version
- Online payment gateway
- QR code system

## **Project Links**

GitHub: <https://github.com/khalid67-ux/MetroRailTicketSystem>

## **Conclusion**

This project demonstrates full-stack development skills using Java and MySQL.