

# WIPRO NGA Program – EP Batch

Capstone Project Presentation – 11 July 2024

Project Title Here - **FastX Online Bus Ticket Booking System**

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# Introduction

## Problem Statement: FastX Online Bus Ticket Booking System

The FastX Online Bus Ticket Booking System is an innovative web-based application designed to streamline the process of reserving bus seats. Users can easily search for bus routes, view schedules, book tickets, and make payments online. By connecting passengers with bus operators, this system simplifies journey planning and booking management, providing a seamless and efficient experience for all users.





## Technologies Used



- Frontend: Angular
- Backend: Java, Spring Boot for API development
- Database: MySQL / SQL Server
- Authentication: JSON Web Tokens (JWT) for secure user authentication





# Project Scope



## Fastx\_BusTicket\_Booking

- User Registration and Authentication
- Bus Route Search
- Route Details and Booking
- Ticket Confirmation
- User Profiles
- Admin Dashboard







## User Login Module

### real-time information

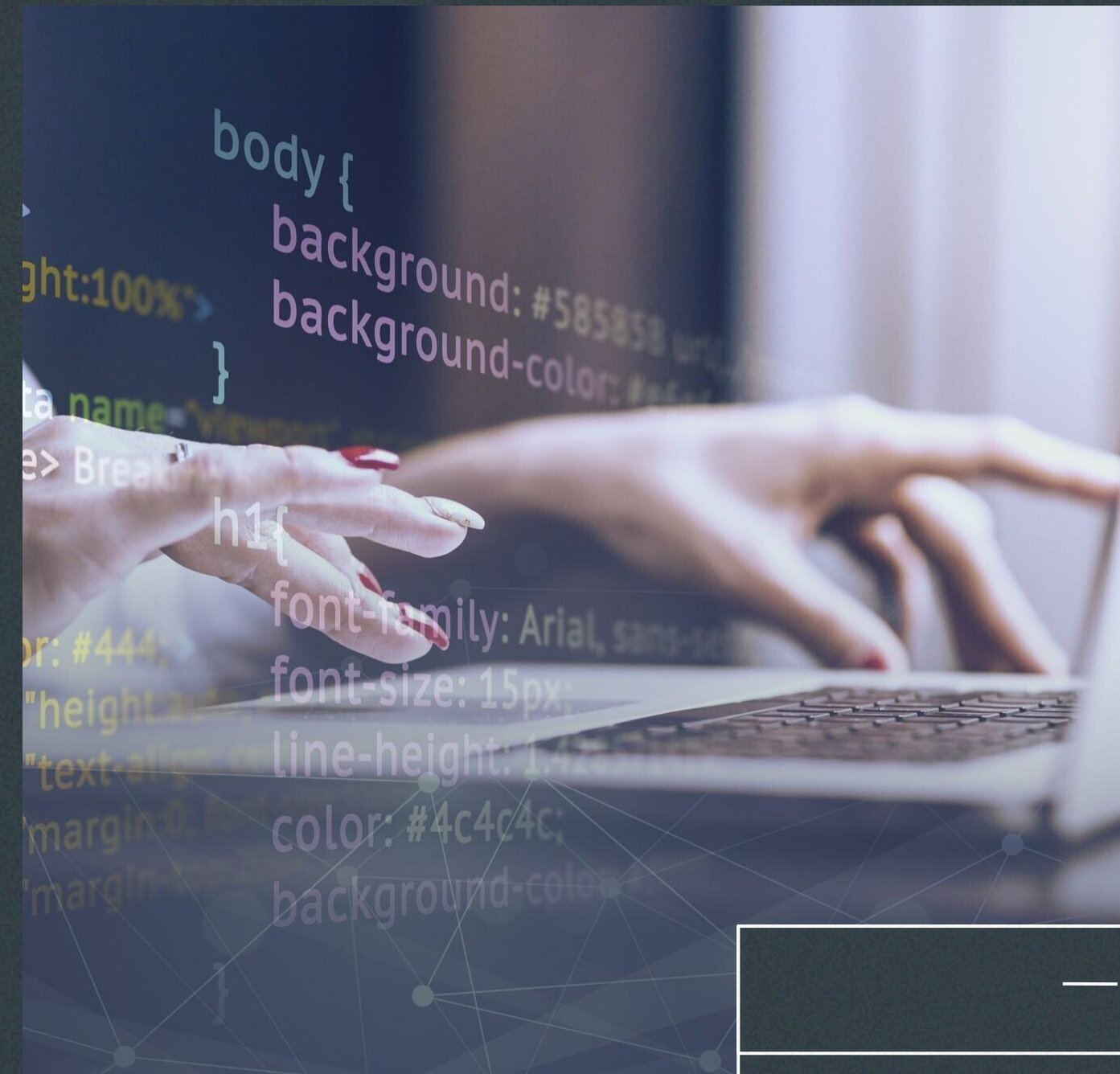
- Functionality:
- Secure user login with JWT authentication
- Validate credentials and generate JWT token
- Store token securely on the client side



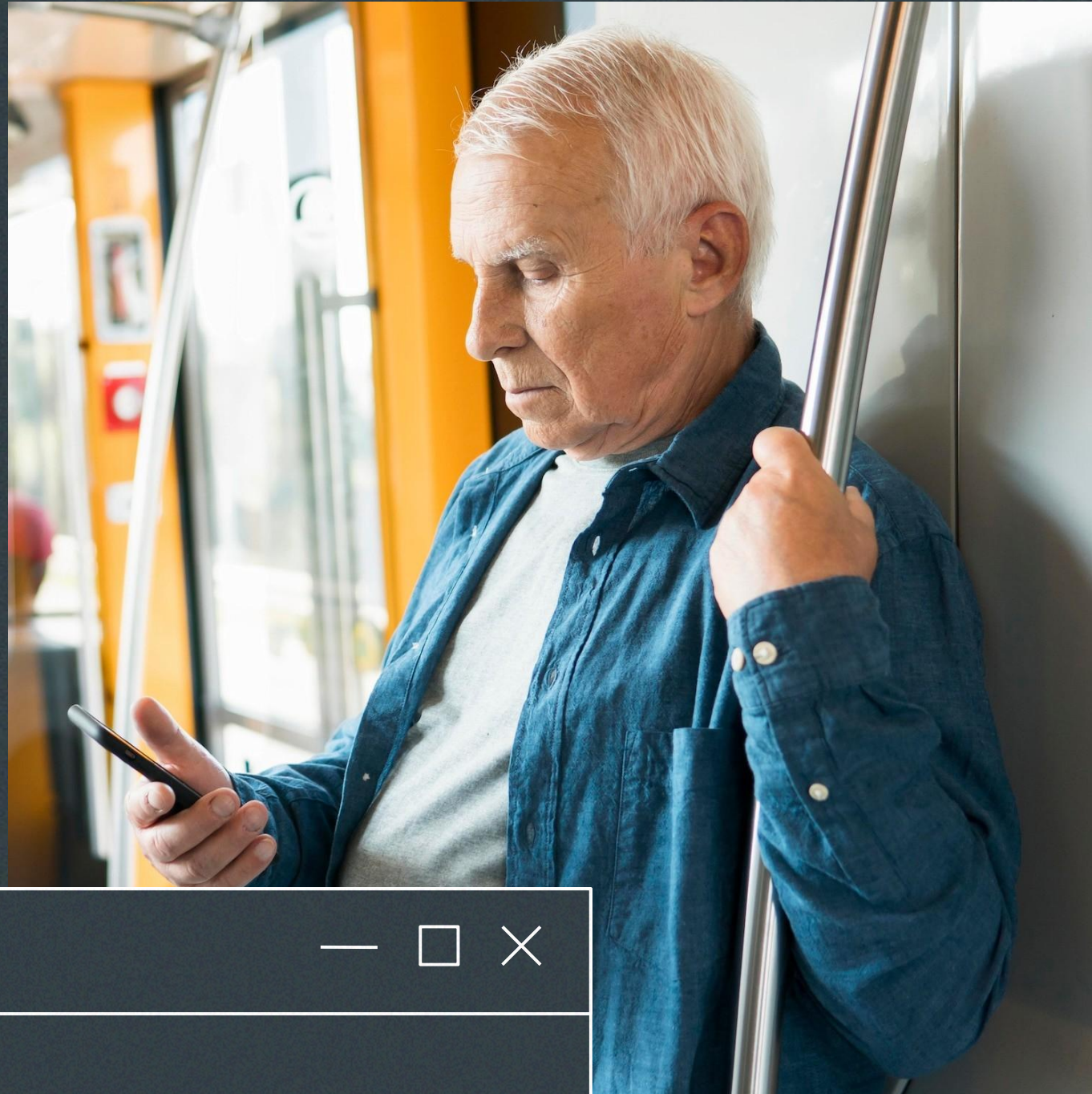


# User Registration Module

- Functionality:
- Create new user accounts
- Collect user details (name, email, password, etc.)
- Validate and store user information securely
- Redirect to login page upon successful registration







## Bus Operator Registration Module

- Functionality:
- Register bus operators with necessary details
- Allow operators to manage bus routes and schedules
- Validate and store operator information securely





# Use Case Diagrams



- Visual representation of system interactions
- Actors: User, Bus Operator, Administrator
- Major use cases: User Registration, Login, Bus Route Management, Booking Management

Use case Diagram:

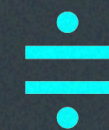




# System Architecture



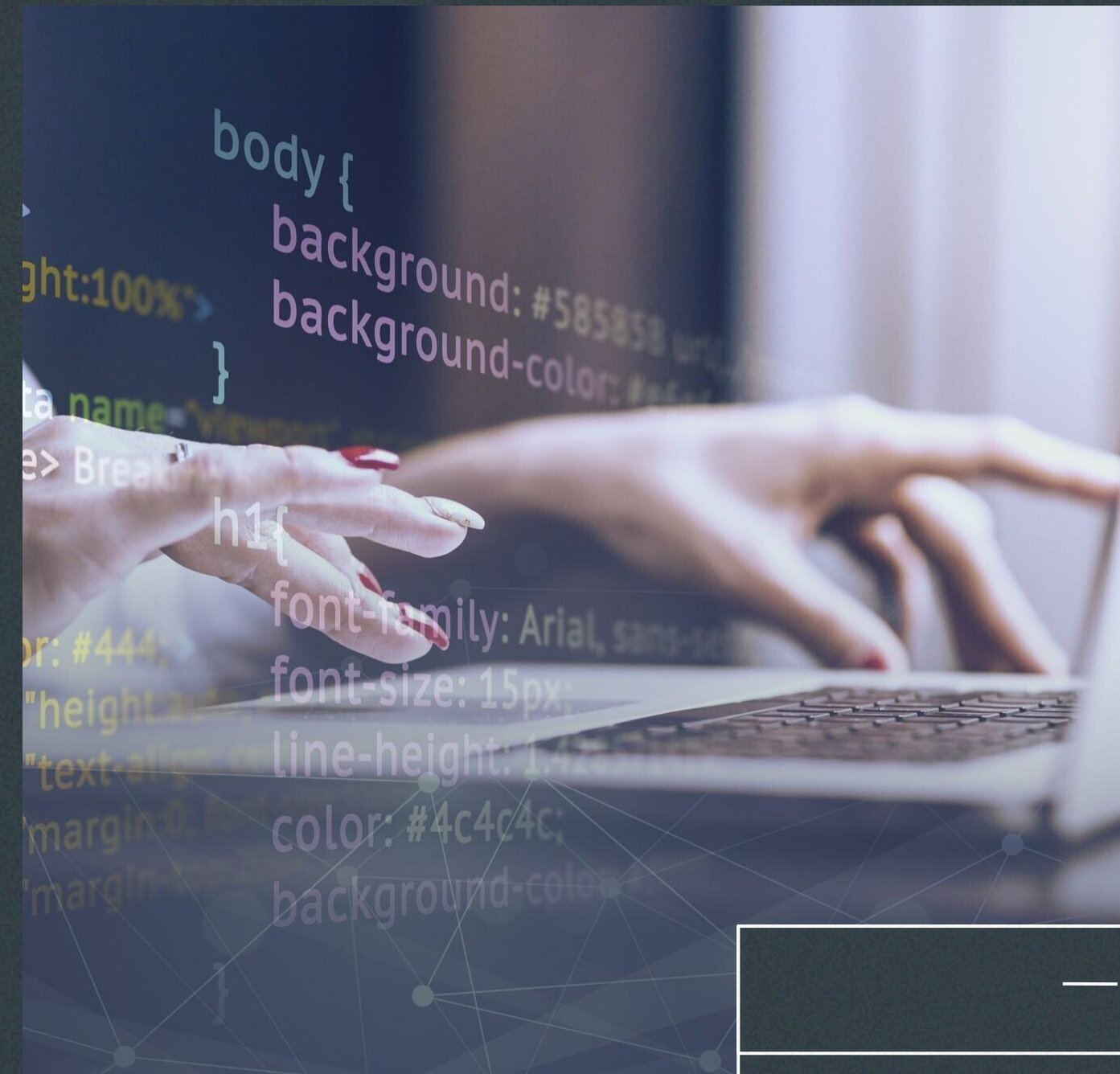
- Frontend: Angular for user interface
- Backend: Spring Boot for API development
- Database: MySQL / SQL Server for data storage
- Authentication: JWT for secure user sessions





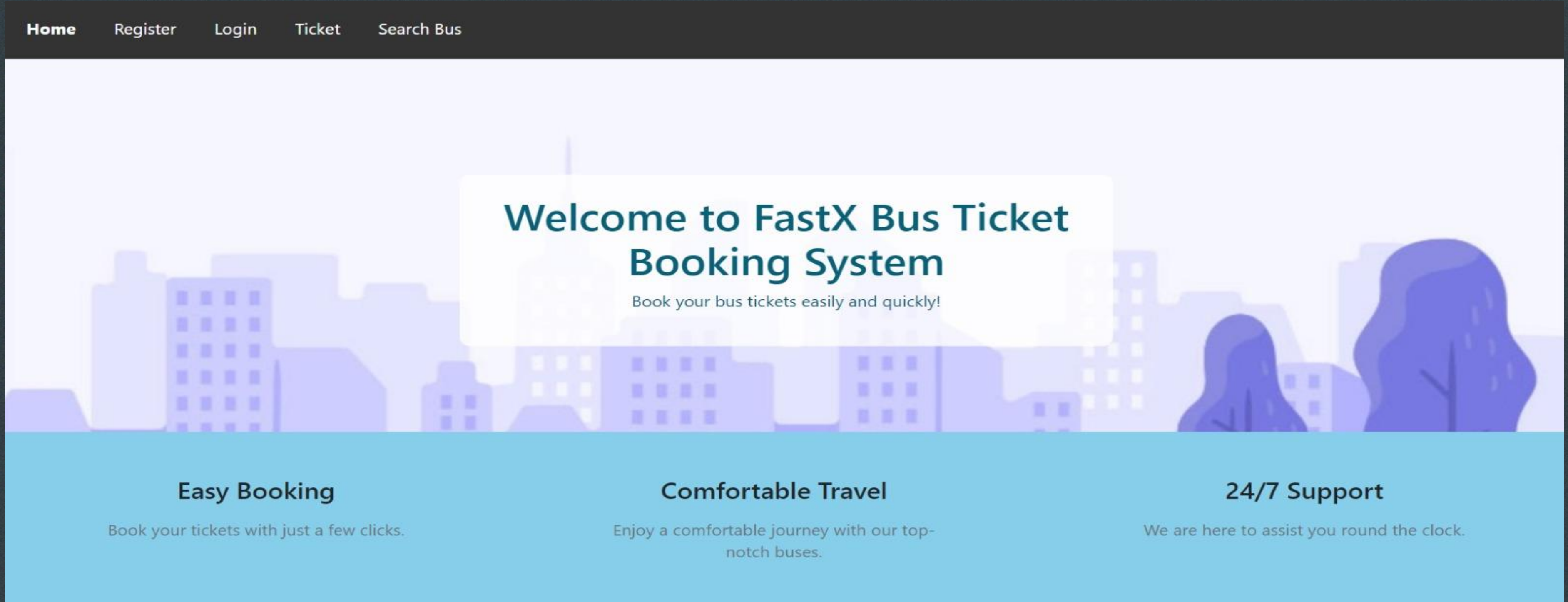
# Development Process

- User Registration:
- Collect and validate user details
- User Login: Secure login and JWT generation
- Bus Operator Management: Register and manage bus operators
- Booking Management: Confirm bookings and handle cancellations





# OUTPUT SNAPSHOTS



Home Register Login Ticket Search Bus

Name:

Email:

Password:

Phone Number:

Address:

[Register](#)

Home Register Login Ticket Search Bus

**Register Administrator**

Name:

Email:

Password:

[Register](#)

Home Register Login Ticket Search Bus

**Bus Operator Login**

Email:

Password:

[Login](#)

Home Register Login Ticket Search Bus

**Login**

Email:

Password:

[Login](#)



## Create Bus Schedule

Bus Name:

Bus Number:

Bus Type:

Number of Seats:

Origin:

Destination:

Timings:

Fare:

Submit

Home

Register

Login

Ticket

Search Bus

Origin:

Destination:

Search Buses

Home

Register

Login

Ticket

Search Bus

## Create Booking

User ID

Schedule ID

Seat Numbers

Booking Date



Total Fare

Status

Submit



## Conclusion: Optimizing the Passenger Journey

The FastX Online Bus Ticket Booking System offers a comprehensive solution for passengers and bus operators."It simplifies the booking process, enhances user experience, and ensures secure transactions."By leveraging modern technologies, FastX aims to revolutionize the way bus tickets are booked, making it more convenient and efficient for everyone".





# Thanks!

Any Queries ?

