

# System Implementation and User Manual: New Bus System

The New Bus System has been designed to enhance the travel experience for passengers, streamline operations for drivers, and offer comprehensive management options for administrators. This document serves as both a system implementation guide and a user manual to facilitate the understanding and usage of the system.

## 1. Introduction

This manual provides an all-encompassing guide to the new bus system, which includes a web-based booking feature for passengers, real-time trip updates for drivers, and comprehensive management capabilities for administrators. Built using modern web technologies such as HTML, CSS, JavaScript, ASP.NET Core Web API, and SQL Server, the system promises efficiency, reliability, and scalable solutions.

## 2. Overview

The New Bus System aims to improve the transportation experience by integrating digital solutions. Passengers can book trips seamlessly via a user-friendly web portal, drivers receive dynamic updates about their routes, and administrators gain access to robust management tools for overseeing buses, stations, trips, and users.

## 3. Technical Specifications

The system is developed using a combination of front-end technologies (HTML, CSS, JavaScript) and back-end frameworks (ASP.NET Core Web API), with data management handled by SQL Server. This technical foundation supports scalability, secure transactions, and intuitive interfaces.

## 4. Deployment

The deployment process involves setting up the application on a web server, configuring the database, and ensuring integrations between different system components. Detailed configuration settings and step-by-step instructions will be provided to facilitate a smooth deployment.

## 5. Features

- Passenger Booking:** A seamless web-based booking interface for passengers to choose and manage trips.

- **Driver Trip Updates:** Real-time notifications and updates for drivers regarding their routes and schedules.
- **Administrative Management:** A comprehensive dashboard for managing buses, stations, trips, and user accounts.

## 6. Roles

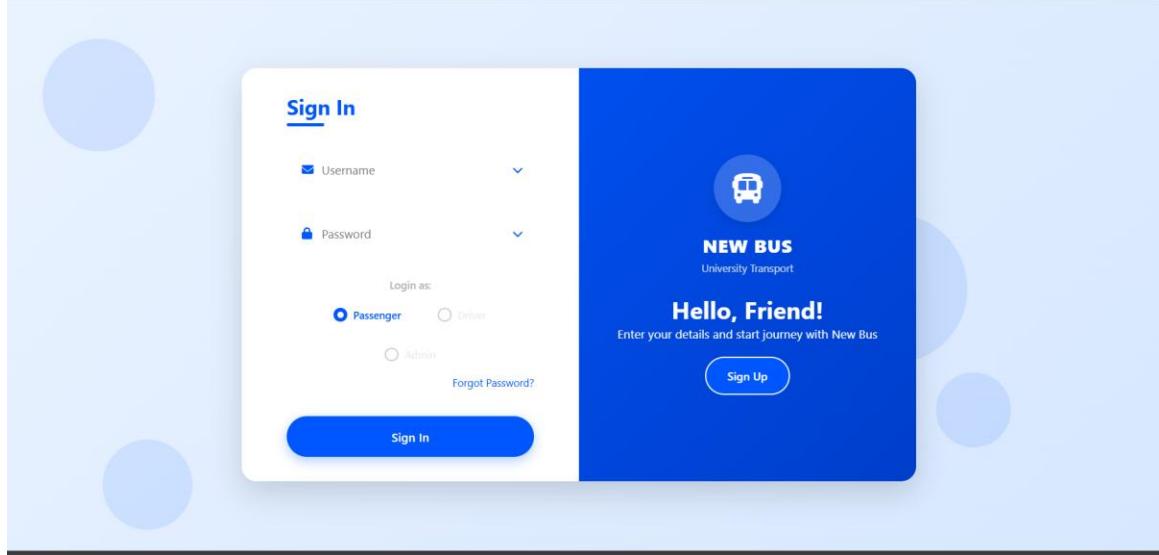
The system assigns different roles based on user requirements:

- **Passenger:** Can book trips, manage bookings, and receive updates.
- **Driver:** Access trip schedules, update statuses, and receive route notifications.
- **Administrator:** Full control over system operations including managing resources and users.

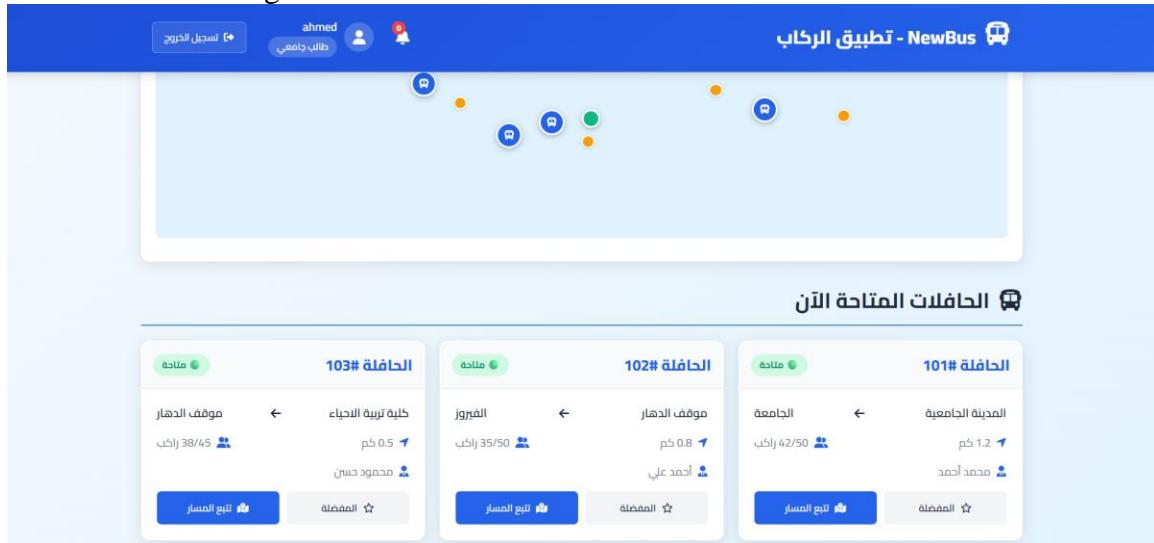
## System Walkthrough (Main Scenario)

### 1. Login / Sign Up (Passenger)

Passenger creates an account and logs into the portal to book a trip.



**2.Trip Selection (Passenger):** Passenger selects a trip from the available options and confirms the booking.



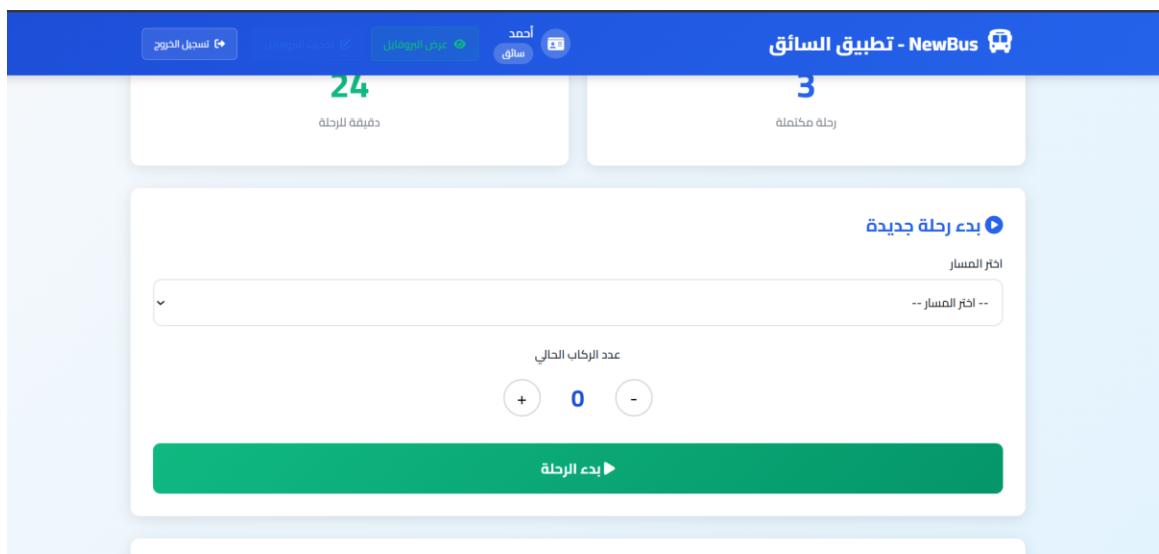
The screenshot shows the NewBus app interface for passengers. At the top, there's a blue header bar with the app name "تطبيق الركاب - NewBus" and a bus icon. Below the header, there's a map showing several bus stops with icons and dots indicating their locations. The main content area is titled "الحافلات المغادرة الآن" (Buses departing now). It lists three bus routes:

الرحلة	الوجهة	النهاية	المسافة	الوقت	الراكب
103#	كلية التربية البدنية	موقف الدهار	٣٨/٤٥	٠.٥ كم	احمد زايد
102#	ال服務或	ال服務或	٣٥/٥٠	٠.٨ كم	أحمد علي
101#	المدينة الجامعية	الجامعة	٤٢/٥٠	١.٢ كم	محمد احمد

Each row includes a "تتبع المسار" (Follow route) button and a "المقطورة" (Trailer) button. The bottom of the screen has a large green "بدء الرحلة" (Start journey) button.

### 3.Driver Dashboard

Driver logs in to receive assigned trip updates and monitor schedules.



The screenshot shows the NewBus app interface for drivers. At the top, there's a blue header bar with the app name "تطبيق السائق - NewBus" and a bus icon. The header also includes a user profile section with the name "ahmed" and a notification bell icon. Below the header, there are two large green boxes displaying route information:

رحلة	الوجهة	النهاية	المسافة	الوقت
24	دمنهور للمرحلة	دمنهور	٣٧	٠.٦ كم
3	رجلة مكاملة	رجلة مكاملة	٣٧	٠.٦ كم

Below these boxes is a section for "رحلة جديدة" (New route) with fields for "عدد الركاب الحالي" (Current number of passengers) and "إذاز المسار" (Route permit). A green "بدء الرحلة" (Start journey) button is at the bottom.

#### 4.Admin Dashboard

Administrator logs into the management dashboard to oversee all system operations.

The screenshot displays the NewBus Admin Dashboard interface. At the top, there are navigation links: 'الرئيسية' (Home), 'تعديل الدخول' (Edit Login), 'تحديث الملف الشخصي' (Update Personal File), and 'ahmed' (User Profile). The title 'لوحة التحكم - NewBus' is prominently displayed at the top right. Below the header, there are four summary cards:

- 5 ركبة اليوم (5 Passengers today)
- 3 حافلة نشطة (3 Active Buses)
- 1 سائق نشط (1 Active Driver)
- 1 راكب مسجل (1 Registered Passenger)

Below these cards is a section titled 'إدارة الركاب' (Passenger Management) with a table:

الاسم الكامل	البريد الإلكتروني	رقم الهاتف	غير محدد	الكلية	الحالة	الإجراءات
ahmed	dd@gmail.com	01012345678	غير محدد	غير محدد	غير محدد	<button>حذف</button> <button>تعديل</button> <button>نشط</button>

At the bottom of this section is a search bar with the placeholder 'ابحث في الركاب...' (Search passengers...).

Below this is another section titled 'إدارة السائقين' (Driver Management) with a table:

الاسم الأول	البريد الإلكتروني	رقم الهاتف	غير محدد	رقم الدافعة	الحالة	الإجراءات
ahmeda	d@gmail.com	01012345678	غير محدد	غير محدد	غير محدد	<button>حذف</button> <button>تعديل</button> <button>نشط</button>

At the bottom of this section is a search bar with the placeholder 'ابحث في السائقين...' (Search drivers...).

## 8. Conclusion

The New Bus System represents a significant advancement in optimizing public transport services. Through effective implementation and utilization, passengers will gain better accessibility, drivers will benefit from improved routing efficiency, and administrators will find enhanced control over operational workflows.