

# Bus Reservation System (Django Project)

## Overview

This project focuses on developing a **web-based Bus Reservation System** using Python Django framework. It enables users to register, log in, search routes, book tickets, and view/manage reservations with an interactive interface.

## Objectives

- Build a full-stack web application with Python and Django.
- Implement CRUD functionalities (registration, login, booking, ticket management).
- Integrate Google Maps for route visualization.
- Provide graphical data visualization for booking statistics.

## Technologies Used

- **Backend:** Python, Django Framework
- **Frontend:** HTML, CSS, JavaScript
- **Database:** SQLite
- **APIs/Tools:** Google Maps API, Django ORM

## Project Structure (GitHub)

- Source code – Django application (models, views, templates)
- Database schema – SQLite DB files
- Screenshots – application interface and outputs
- Documentation – project report and user guide

## Key Features

- Online ticket booking with user authentication
- Route search and seat reservation
- Integration with Google Maps
- User-friendly and responsive interface

## Key Learnings

- Practical experience in **Python Django web development**.
- Knowledge of **CRUD operations and relational databases**.
- Hands-on integration of **APIs (Google Maps)**.
- Understanding of **full-stack development workflow**.
- Project documentation and repository structuring.