Abstract

This project is a smart local transportation system that helps users track the location of local buses in Kathmandu Valley. Users can select a pickup point and a destination, and the system shows them the buses that go through those stops. When a user selects a bus, they can view its live location on a map.

For drivers, the project includes a registration and login system. After registration, drivers must be verified by an admin before they can start sharing their bus location. The driver dashboard lets them start and stop live tracking. The live updates are sent using WebSocket technology via Django Channels.

The project is built using Django with SQLite as the database, and Tailwind CSS is used to create a clean and modern front end. Also, a Dijkstra algorithm is implemented from scratch to handle route checks and calculations.

Team Members:

1. Santosh Thapa (28329/078)
2. Subarna Limbu (28334/078)
3. Tushar Kunwar (28346/078)