

Project Name: TransHUB

Project Overview: The goal of this project is to create an online community platform where individuals can find and offer transportation options. The platform will facilitate the calculation of distances, determination of the best, fastest, and cheapest modes of transport, estimation of travel time, and access to train and flight schedules. It will also support carpooling (covoiturage) and community communication for travel advice.

Objectives:

- Develop a user-friendly web application.
- Ensure seamless registration and authentication for users.
- Implement robust search and matching algorithms to connect individuals with transportation options.
- Provide features for calculating distances, travel times, and costs.
- Ensure the platform is secure, reliable, and scalable.

Scope of Work:

- 1. User Registration and Authentication:**
 - Implement user registration forms.
 - Enable email verification.
 - Provide social media login options.
- 2. User Profiles:**
 - Develop detailed user profiles including travel preferences and contact information.
 - Enable profile pictures and personal bios.
 - Implement a rating and review system for users offering transportation.
- 3. Search and Matching:**
 - Create functionality for users to search for available transportation options.
 - Implement filters based on location, travel type, and user ratings.
 - Develop a matching algorithm to suggest best-fit transportation options.
- 4. Distance and Cost Calculation:**
 - Implement a system to calculate distances between locations.
 - Provide estimations for travel time, costs, and various transportation modes.
 - Allow users to compare options based on cost, speed, and convenience.
- 5. Community Communication:**
 - Develop a feature for users to post requests for transportation.
 - Enable community interaction for travel advice and carpooling opportunities.
 - Implement an in-app messaging system for users to communicate.
- 6. Scheduling Information:**
 - Provide up-to-date schedules for trains and flights.
 - Enable users to search and view schedules based on their travel plans.
 - Implement notifications for schedule updates and changes.
- 7. Safety and Security:**
 - Implement identity verification for users offering transportation.
 - Ensure data privacy and secure storage of user information.

- Develop moderation tools to handle inappropriate content and user behavior.
- 8. **Admin Dashboard:**
 - Create an admin dashboard to manage users, transportation posts, and schedules.
 - Provide analytics and reporting tools for platform performance.
 - Implement moderation tools to handle user feedback and disputes.

Technology Stack:

- **Frontend:** Vue.js + Tailwind for the web application.
- **Backend:** Laravel for the server-side application.
- **Database:** MySQL for data storage.
- **Authentication:** Laravel Sanctum.

Key Deliverables:

- Fully functional web applications.
- User registration and authentication systems.
- Distance, cost, and travel time calculation features.
- Community communication and carpooling functionalities.
- Scheduling information for trains and flights.
- Admin dashboard.
- Comprehensive documentation and user manuals.