

MUTABAZI AMOS
24432

FLEET MANAGEMENT SYSTEM

Project Requirements:

Purpose of the Project:

The purpose of the Fleet Management System is to efficiently manage and monitor a fleet of vehicles. This includes tracking vehicle locations, managing drivers, scheduling maintenance, and providing insights into overall fleet performance.

Expected Outcomes:

- Real-time tracking of vehicle locations.
- Efficient scheduling of maintenance tasks.
- Driver management and performance tracking.
- Cost analysis and optimization of fuel consumption.

Constraints/Limitations:

- Budget constraints for hardware and software resources.
- Integration limitations with existing systems.
- Compliance with local regulations and data privacy laws.

ii. Project Plan:

Scope:

- Define the features and functionalities of the Fleet Management System.
- Specify the number and types of vehicles to be managed.
- Identify the target users (administrators, drivers, etc.).

Timeline:

- Milestone 1: Database Design and Backend Development (6 days)
- Milestone 2: Frontend Development (3 days)
- Milestone 4: Testing and Bug Fixing (1 day)
- Milestone 5: Deployment and User Training (1 day)

Resources:

- Developers: Amos
- Designers: Amos
- Testers: Amos

v. User Documentation:

Login Credentials:

- Admin:
 - Username: admin@example.com
 - Password: admin123
- Driver:
 - Username: driver@example.com

- Password: driver123

Navigation:

- Dashboard: Overview of the fleet's status.
- Vehicle Tracking: Real-time location tracking.
- Maintenance Schedule: Schedule and track maintenance tasks.
- Driver Management: Add, edit, and track drivers.

Features:

- Real-time vehicle tracking.
- Maintenance alerts and notifications.
- Driver performance reports.

vi. Technical Documentation:**Architecture:**

The system follows a client-server architecture with a frontend developed in React.js, a backend in Spring Boot, and a MySQL database.

Implementation:

- Frontend: Html and css
- Backend: Spring Boot with Java for RESTful APIs.
- Database: MySQL for data storage.