

Waste Track –

Waste Collection and Vehicle Management System

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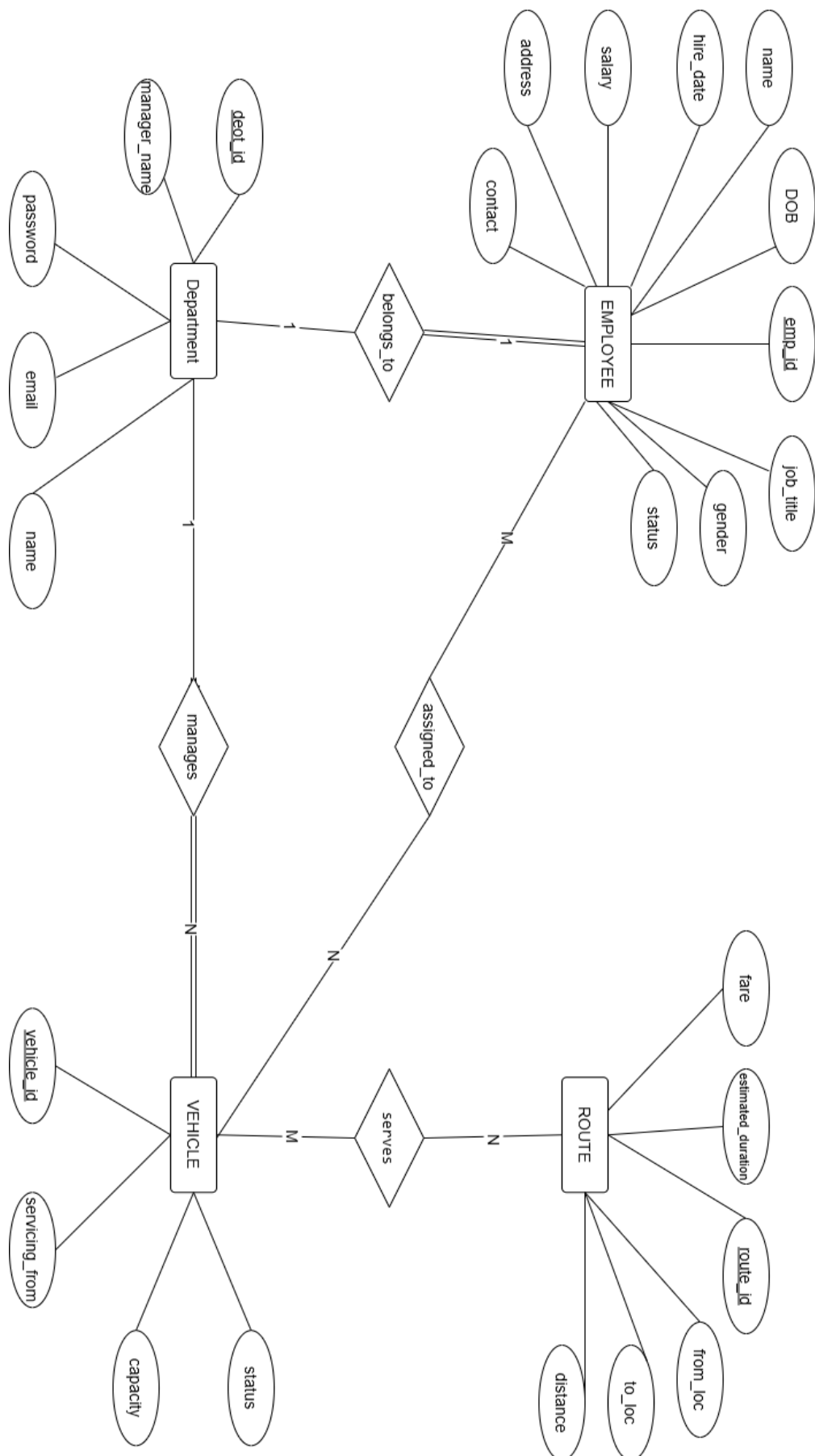
Abstract:

The project **WasteTrack – Waste Collection and Vehicle Management System** is a web-based application designed to streamline municipal solid waste collection and complaint handling through a centralized database system. The application replaces manual and inconsistent processes with a digital, role-based platform that improves efficiency and accountability. Administrators can manage users, assign vehicles to specific areas, monitor collection progress, and resolve complaints, while citizens can file complaints, track their status, and view collection details. Vehicle operators receive area assignments and update collection statuses through their dashboards. The system is developed using **Node.js** for backend processing, **HTML/CSS/JavaScript** for the frontend, and **MySQL** for relational database management with normalized tables to ensure data integrity. By digitizing waste management workflows, **WasteTrack** enhances transparency, promotes citizen participation, and contributes to sustainable urban infrastructure.

Tech Stack

- **Frontend: HTML, CSS, JavaScript**
- **Backend: Node.js**
- **Database: MySQL**

Entity Relationship Diagram:



Relational Model diagram:

