📦 Delivery Management System - Documentation

🧭 Overview

This system allows warehouses to manage delivery agents and orders efficiently. Agents check in daily, deliver assigned orders, and receive wages based on performance. Redis is used to track real-time agent availability.

🔄 System Flow

1. Admin creates Warehouses and Agents
- Warehouses created manually or seeded.
- Agents are linked to a specific warehouse.

2. Agent Check-In (Morning)
- Agent clicks **Check-In** from UI.
- Backend sets:
  - `agent.isCheckedIn = true`
  - `currentSession.checkInTime = now`
  - Adds `agentId` to Redis (`available_agents` set).

3. Create Orders
- Admin creates an order.
- System finds an available agent via Redis.
- Ensures agent:
  - Has not exceeded 10 hours worked today.
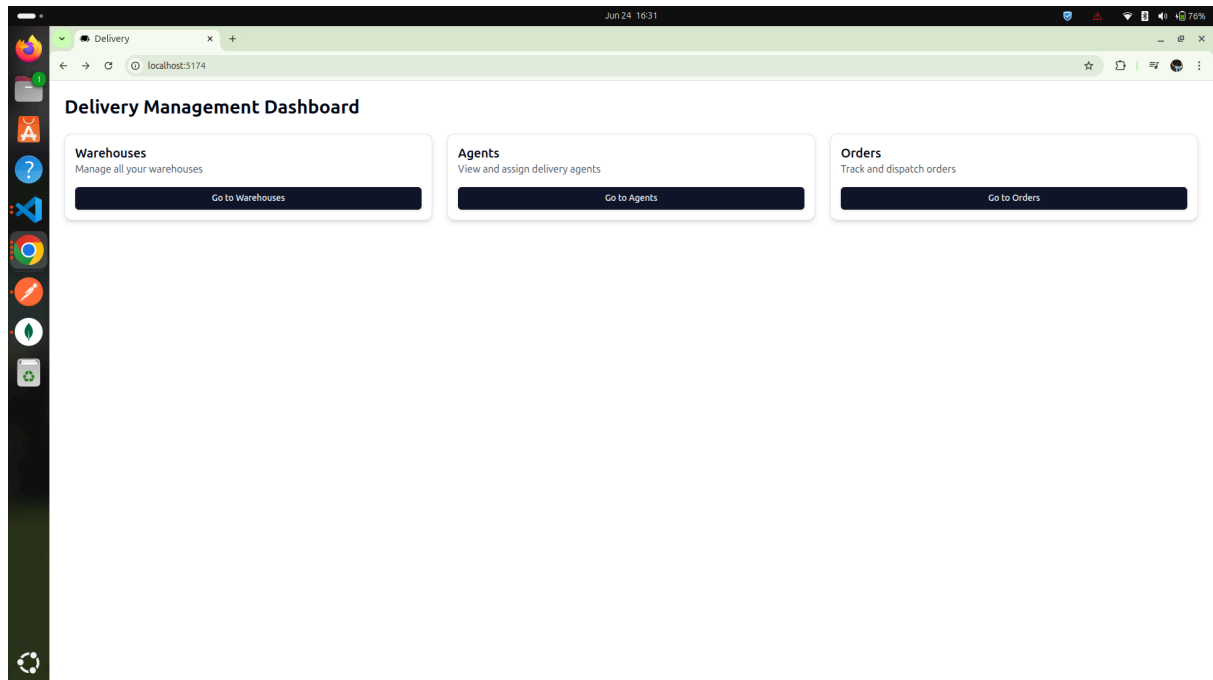 - Has not driven over 100 KM today.
- Assigns order to the agent.

4. Agent Check-Out (Evening)
- Clicks **Check-Out**.
- System calculates:
  - `hoursWorked`, `kmCovered`, and `ordersCompleted` for today.
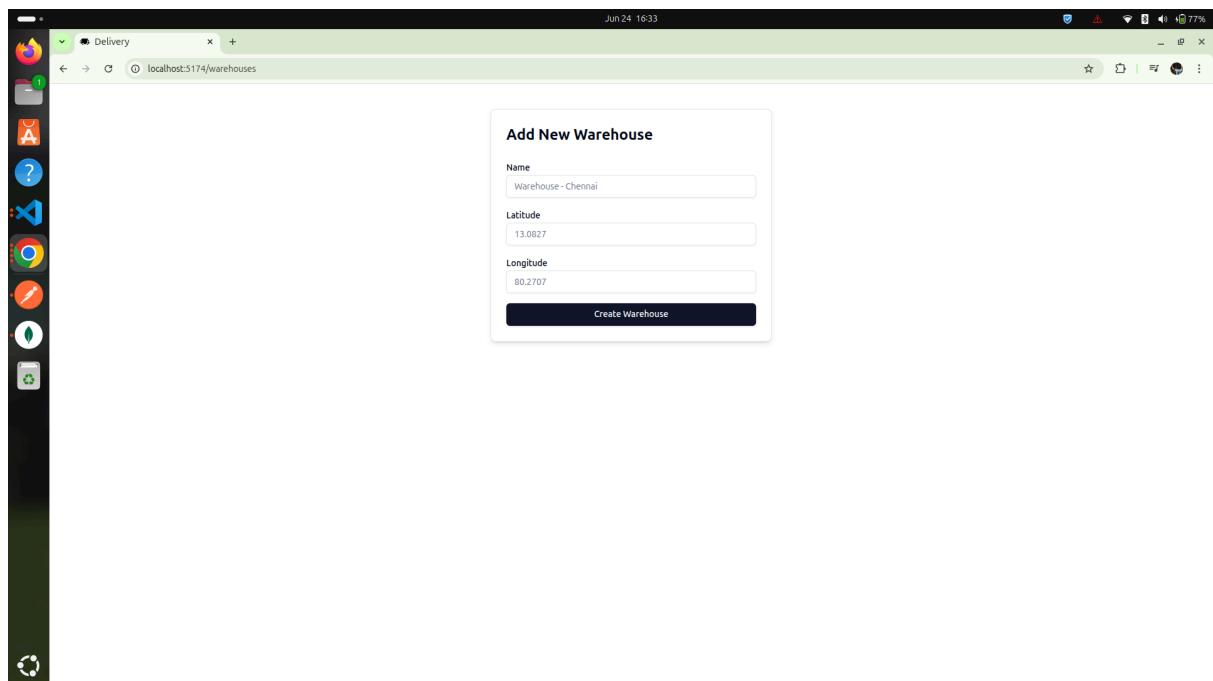 - Pushes to `sessions[]` array.
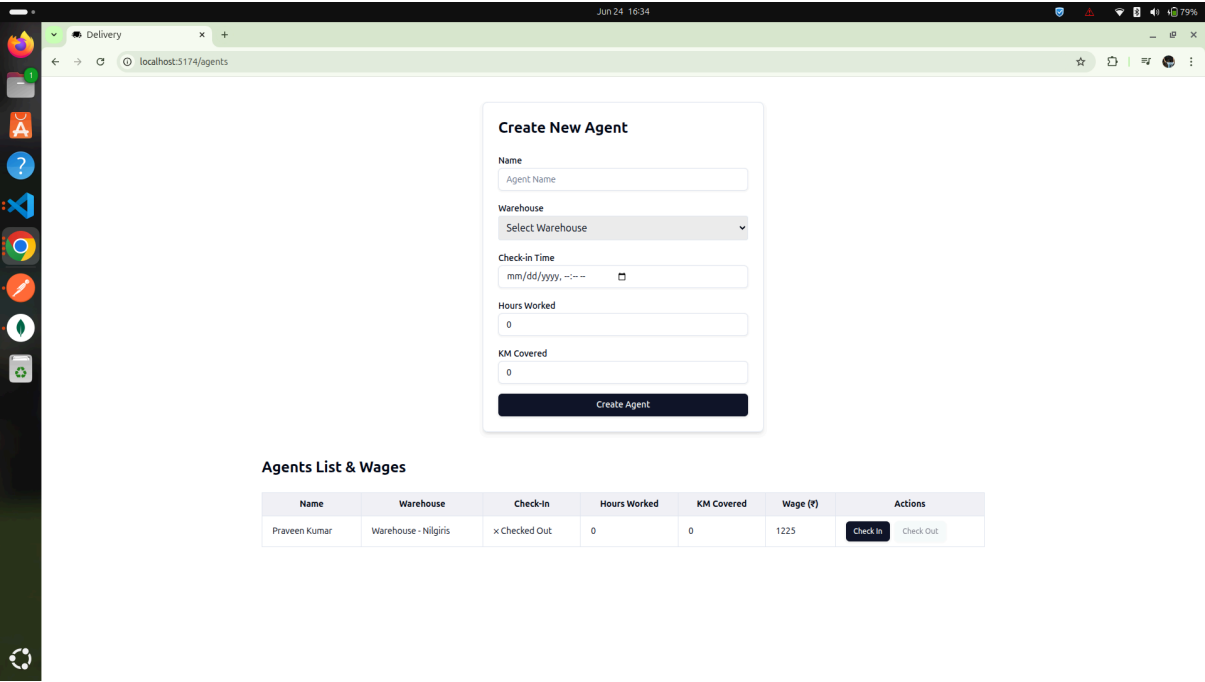 - Calculates wages.

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📸 Screenshots
This is the dashboard page

2.)This is the warehouse creation page

3.)This the agent creation and we can make agent login and logout in the table

4.) This is the Order creation page and we can make an order its received and delivered