End of Module 3 Product Design

Trailer Yard Management System - MVP Functional Requirements

1. USER AUTHENTICATION & AUTHORIZATION

1.1 Role-Based Access

- As a USER, I can manage trailer assignments and update order statuses but cannot delete records or manage customers/shippers.
- As an ADMIN, I have full access to create, update, and delete all records (customers, shippers, trailers, orders, assignments).

1.2 Login & Session Management

- As a user, I can log in with my credentials to access role-specific features.
- As an authenticated user, I am automatically redirected to a dashboard relevant to my role upon login.

2. TRAILER MANAGEMENT

2.1 View Trailers

- As any user, I can view a list of all trailers in the yard.
- As any user, I can search for a specific trailer by its number.
- As any user, I can update trailer details (e.g., status, location).

2.2 Modify Trailers (ADMIN Only)

- As an ADMIN, I can add a new trailer to the system.
- As an ADMIN, I can delete a trailer from the system.

3. ASSIGNMENT MANAGEMENT

3.1 View Assignments

- As any user, I can view a list of all trailer assignments (employee, trailer, door number, status).
- As any user, I can filter assignments by status (e.g., "Active", "Completed").

3.2 Manage Assignments (USER & ADMIN)

- As a USER or ADMIN, I can create a new assignment (linking an employee to a trailer).
- As a USER or ADMIN, I can update an existing assignment (e.g., change status or reassign
- As a USER or ADMIN, I can delete an assignment (marking it as inactive).

4. ORDER MANAGEMENT

4.1 View Orders

- As a USER or ADMIN, I can view all orders in the system.
- As a USER or ADMIN, I can search orders by:

- * Order number
- * Trailer number
- * Customer name
- * Shipper name
- * Status (e.g., "Pending", "Loaded", "Shipped")

4.2 Modify Orders (ADMIN Only)

- As an ADMIN, I can create a new order.
- As an ADMIN, I can update order details (e.g., status, customer, shipper).
- As an ADMIN, I can delete an order.

5. CUSTOMER & SHIPPER MANAGEMENT

5.1 View Customers & Shippers

- As any user, I can view a list of all customers.
- As a USER or ADMIN, I can search for a customer by name.
- As any user, I can view a list of all shippers.
- As a USER or ADMIN, I can search for a shipper by name.

5.2 Modify Customers & Shippers (ADMIN Only)

- As an ADMIN, I can add a new customer or shipper.
- As an ADMIN, I can update customer/shipper details (e.g., contact info).
- As an ADMIN, I can delete a customer or shipper.

6. DASHBOARD & REPORTING

6.1 Overview Dashboard

- As an authenticated user, I can see a dashboard showing:
- * Active assignments
- * Available trailers















