Schema and table creation

```
--  Users Table
CREATE TABLE Users (
   id INT AUTO_INCREMENT PRIMARY KEY,
   email VARCHAR(255) NOT NULL UNIQUE,
   password VARCHAR(255) NOT NULL,
   phone_number VARCHAR(20) NOT NULL,
   role ENUM('customer', 'scheduler', 'driver') NOT NULL,
   truck_registration_number VARCHAR(50), -- Nullable for non-drivers
   truck_capacity INT, -- Nullable for non-drivers
   created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);
CREATE TABLE Products (
   id INT AUTO_INCREMENT PRIMARY KEY,
   name VARCHAR(255) NOT NULL,
   price DECIMAL(10, 2) NOT NULL
);
CREATE TABLE Deliveries (
   id INT AUTO_INCREMENT PRIMARY KEY,
   customer_id INT NOT NULL,
   product_id INT NOT NULL,
   quantity INT NOT NULL,
   delivery_date DATE NOT NULL,
   delivery_address VARCHAR(255) NOT NULL,
   FOREIGN KEY (customer_id) REFERENCES Users(id),
   FOREIGN KEY (product_id) REFERENCES Products(id)
);
```

```
CREATE TABLE Missions (
  id INT AUTO_INCREMENT PRIMARY KEY,
  driver_id INT NOT NULL,
  route TEXT NOT NULL,
  mission_date DATE NOT NULL,
  status ENUM('pending', 'completed') DEFAULT 'pending',
  FOREIGN KEY (driver_id) REFERENCES Users(id)
);
```

Relationships

User

- One-to-Many with Delivery (user_id).
- One-to-Many with missions (driver_id for role "driver").

Product

- One-to-Many with Delivery (product_id).

Delivery

- Many-to-One with User (user_id).
- Many-to-One with Product (product_id).

Missions

- Many-to-One with User (driver role) (driver_id).

UML CLASS DIAGRAM FOR GOODS DELIVERY APPLICATION