Problem Statement: Pharmacy Delivery CRM

## Project Overview:

The Pharmacy Delivery CRM is designed to manage medicine orders, prescriptions, and delivery schedules. By centralizing all data on customers, their prescriptions, and delivery logistics, the system helps ensure accurate and timely medication delivery, improves patient safety, and streamlines communication between pharmacists, couriers, and patients. It provides a unified platform to track the entire process from order submission to final delivery, reducing manual errors and enhancing the overall customer experience.

## Problem Statement:

In many pharmacies, the process of handling delivery orders is often manual and disorganized. This can lead to a number of common issues, including:

* Manual tracking of prescriptions and delivery schedules via phone calls or paper records, increasing the risk of errors.
* Inefficient routing and scheduling of deliveries, leading to delays and increased costs.
* Lack of a centralized system to track customer order history and manage recurring prescriptions.
* An inability to provide real-time status updates to customers, leading to poor customer service.

There is a need for a unified system that can:

* Provide a single interface to manage medicine orders and prescriptions.
* Automatically generate and optimize delivery routes for couriers.
* Offer dashboards and reports to monitor delivery status, order volume, and key performance metrics.
* Improve communication by sending automated notifications to customers and couriers.

## Project Objectives:

* **Centralize Order & Prescription Data:** Build a platform to track all medicine orders and their corresponding prescriptions.
* **Automate Delivery Logistics:** Implement logic to manage delivery schedules and optimize courier routes.
* **Provide Performance Visibility:** Create reports and dashboards to track key metrics like delivery times and order volume.
* **Improve Communication:** Configure automated notifications for order status updates for both customers and couriers.

## Salesforce Concepts Used:

To achieve the objectives of the Pharmacy Delivery CRM, the project will apply a combination of administrative and developer concepts.

## Admin Concepts:

* **Custom Objects & Fields:** Create custom objects for "Order," "Prescription," and "Delivery Route," along with fields for tracking medicine details, delivery address, and delivery status.
* **Relationships (Master-Detail, Lookup):** Link the "Prescription" and "Delivery Route" objects to the "Order" object to maintain a complete record of the delivery process.
* **Page Layouts & Record Types:** Tailor page layouts for different user profiles, such as pharmacists, couriers, and managers.
* **Validation Rules:** Ensure data accuracy, such as making sure the "Prescription" field is mandatory for all new orders.
* **Flows:** Use a Record-Triggered Flow to automate processes, such as notifying a courier when a new delivery is assigned to them.
* **Reports & Dashboards:** Track key metrics like the number of orders per day, delivery completion rates, and the most common medications.

## Developer Concepts:

* **Apex Triggers & Classes:** Implement an **Apex Trigger** on the "Order" object to automatically check for prescription validity or to enforce inventory management rules.
* **Lightning Components / LWC:** Build a custom **Lightning Web Component (LWC)** to create a real-time tracking map for couriers or a dashboard for pharmacists to manage prescriptions.
* **Integration:** (Optional) Connect with an external system to verify prescriptions or to integrate with a third-party logistics provider for delivery tracking.

## Security & Sharing:

* **Profiles & Permission Sets:** Define different access levels for pharmacists, couriers, and managers. For instance, couriers would only have access to their assigned deliveries, while managers would have full access to all data.
* **Sharing Rules:** Implement a sharing rule to ensure that pharmacists in a specific branch can only view orders and prescriptions for that location.
* **Field-Level Security:** Control which fields are visible to different user profiles. For example, hide sensitive patient information from couriers.