Pharmacy Delivery CRM – Full Explanation

Phase 1: Problem Understanding & Industry Analysis

■ Goal: Understand what we're building and why.

1. Requirement Gathering
- Customers need to order medicines online with prescription upload.
- Pharmacist verifies prescriptions before fulfillment.
- Orders need delivery scheduling and tracking.
- Status updates required: Pending → Verified → Out for Delivery → Delivered.

2. Stakeholder Analysis
- Customer: places orders, uploads prescriptions.
- Pharmacist: verifies prescriptions, prepares orders.
- Dispatcher: assigns rider, manages delivery.
- Delivery Rider: delivers medicines and updates status.
- Manager: monitors reports and overall operations.

3. Business Process Mapping
Customer places order → Prescription uploaded → Pharmacist verifies → Delivery assigned → Rider delivers → Status updated → Customer notified.

4. Industry-specific Use Case Analysis
- Compliance with prescription verification is critical.
- On-time delivery is crucial for customer satisfaction.
- Small pharmacies need simple, low-cost systems.

5. AppExchange Exploration
- Existing pharma/delivery apps are heavy; we build a simpler custom CRM solution on Salesforce.

Phase 2: Org Setup & Configuration

■ Goal: Prepare Salesforce environment.

1. Use Salesforce Developer Edition Org.
2. Configure Company Info, Business Hours (9 AM–9 PM), Holidays.
3. Users & Licenses: Pharmacist, Dispatcher, Rider, Manager.
4. Profiles & Roles: Manager > Pharmacist > Dispatcher > Rider.
5. Permission Sets: extra access for Reports if needed.
6. OWD: Order__c private, Prescription__c private, Delivery__c private.
7. Sharing Rules: Manager sees all, Pharmacist sees assigned orders.
8. Setup Login Hours: restrict Rider login to 7 AM–10 PM.

Phase 3: Data Modeling & Relationships

■ Goal: Build data structure.

Objects:

- Contact (Customer)
- Order__c (Order_Number, Status, Notes, Total Amount)
- Prescription__c (File, Verification Notes, Verified By)
- Order_Item__c (Medicine, Quantity, Dosage)
- Delivery__c (Rider Name, Rider Phone, Scheduled Time, Delivery Status)

Relationships:
- Contact ↔ Order__c → Lookup
- Order__c ↔ Prescription__c → Lookup
- Order__c ↔ Delivery__c → Lookup
- Order__c ↔ Order_Item__c → Master-Detail

Phase 4: Process Automation (Admin)

■ Goal: Automate workflows.

1. Validation Rules: Delivery date ≥ Order date, Prescription file required.
2. Flows:
- Screen Flow for Order creation.
- Record-triggered Flow: set Verified/Rejected.
- Assignment Flow: assign rider, schedule delivery.
3. Approval Process: optional for high-value orders.
4. Notifications: email to customer on status changes.

Phase 5: Apex Programming (Developer)

■ Goal: Advanced logic.

1. Trigger: prevent order without prescription.
2. Trigger: block status change to Out for Delivery unless Verified.
3. Apex Class: OrderService for reusable logic (calculate totals).
4. Test Classes: create sample data, assert validation.

Phase 6: User Interface Development

■ Goal: User-friendly app.

1. Lightning App: “Pharmacy Delivery CRM”
2. Record Pages: Order with related Prescription, Items, Delivery.
3. Tabs: Orders, Prescriptions, Deliveries.
4. Flow Screens: guided order creation, verification.
5. Utility Bar: Quick action → New Order.
6. (Optional) LWC for multi-item entry or prescription preview.

Phase 7: Integration & External Access

■ Goal: Connect external services.

1. Named Credentials: store API keys for SMS/email.
2. External Services: optional integration with delivery tracking.
3. REST Callouts: simulate SMS to customers (future scope).
4. Platform Events: notify rider app when delivery assigned.

Phase 8: Data Management & Deployment

■ Goal: Manage and migrate data.

1. Import Wizard: load sample customers, medicines.
2. Data Loader: bulk orders and prescriptions.
3. Duplicate Rules: prevent duplicate prescriptions.
4. Change Sets: deploy customizations to production.
5. Weekly Data Export: for backup.

Phase 9: Reporting, Dashboards & Security Review

■ Goal: Monitor operations and secure data.

Reports:
- Orders by Status
- Deliveries by Rider
- Prescriptions Verified per Pharmacist

Dashboards:
- Order Lifecycle Dashboard (pie chart by status)
- Rider Performance Dashboard

Security:
- Orders private, visible only to assigned staff.
- Field-level security for sensitive prescription notes.
- Session timeout 30 min for Riders.

Phase 10: Final Presentation & Demo Day

■ Goal: Wrap up project.

1. Pitch Presentation: Problem → Solution → Benefits.
2. Demo: Create order, verify prescription, assign delivery, update status, show reports.
3. Handoff Documentation: system design doc, user guide.
4. Showcase on LinkedIn/Portfolio.