**Project Design Phase-II**

**Data Flow Diagram & User Stories**

**SCENARIO**

Tracking, ordering, using, and reviewing medical inventory in a healthcare facility such as a hospital or clinic using a digital system.

**Steps**

| **Step** | **What does the person (or group) typically experience?** |
| --- | --- |
| **Entice** | Staff receives an alert (e.g., low stock notification), or manually observes inventory shortage. |
| **Enter** | The pharmacist or inventory staff logs into the inventory system to take necessary actions. |
| **Browse** | They check current stock levels, expiry dates, usage trends, and reorder history. |
| **Engage** | The user selects products, reviews vendors, and initiates a purchase order. |
| **Start Purchase** | A request is raised and routed for approval. |
| **Complete Payment** | The purchase is approved and processed via accounts/administration. |
| **Confirm & Book Delivery** | The system logs the expected delivery. Delivery details are confirmed. |
| **Receive Inventory** | Medical items are received, verified (e.g., quantity, expiry), and logged into the system using barcode/RFID/manual entry. |
| **Use Items** | Items are dispensed or consumed for patient care or procedures, and usage is logged. |
| **Prompt for Review** | The system prompts staff for stock audits, reviews, and feedback. |
| **Extend** | Reports are generated; the system uses data to suggest future reorder levels or preferred suppliers. |

**Interactions**

| **What interactions do they have at each step?** |
| --- |
| System notifications, login, inventory dashboard, reorder interface, vendor selection, barcode scanning, approvals, stock updates, report generation |

**Things**

| **What digital touchpoints or physical objects would they use?** |
| --- |
| Medical Inventory Management Software, purchase order module, barcode scanner, expiry tags, reports, tablets or desktops, vendor list, delivery note |

**Places**

| **Where are they?** |
| --- |
| Pharmacy, Medical Store Room, Admin Office, Accounts Department, Vendor Supply Chain |

**People**

| **Who do they see or talk to?** |
| --- |
| Inventory Manager, Pharmacist, Purchase Officer, Vendor, Finance Officer, Admin |

**Goals & Motivations**

| **At each step, what is the person’s primary goal or motivation?** |
| --- |
| Help me maintain continuous supply of essential medicines |
| Help me avoid expired or overstocked items |
| Help me place and track orders quickly |
| Help me maintain accountability and prepare for audits |
| Help me save time and reduce manual errors |

**Positive Moments**

* Automatic low-stock alerts save time
* Quick barcode scanning during receiving
* Clear reorder suggestions based on usage data
* Real-time visibility into stock levels and expiry

**Negative Moments**

* Manual data entry can result in mistakes
* Delay in admin approval slows down ordering
* Vendor delivery delays or mismatches
* Lack of clarity in inventory usage reports

**Areas of Opportunity**

* Introduce auto-reorder functionality for routine stock
* Integrate mobile app for real-time tracking and updates
* Include AI-based inventory forecasting
* Send expiry alerts via SMS/email
* Add vendor performance ratings for better choice

