# Functional Modules Identified for Sangam Hotels

**🔖 1. Master Catalog (Admin - All Branches)**

**Purpose:** Central Catalog of all items used across branches.

* ✅ CRUD operations for:
  + Ingredients (perishable/non-perishable)
  + MRP Products (packaged goods, etc.)
* ✅ Item classification: perishable, non-perishable
* ✅ Search, tag, and filter support

**📦 2. Inventory Management (Warehouse)**

**Purpose:** Real-time stock management, visibility, and adjustments.

* Stock In / Out (with reason codes)
* Stock Adjustments: wastage, expiry, theft
* 📊 Reports:
  + Stock Movement (Branch-wise: daily/monthly)
  + Inward Movement (Vendor-wise: daily/monthly/weekend)
  + Branch-wise Balance Sheet
* 📉 Price History Tracker (auto-extracted from invoices)
* ⚠️ Minimum Stock Alerts (auto-trigger thresholds)

**📑 3. Order Management System (Branch + Warehouse)**

**Purpose:** Handle orders from creation to dispatch, including returns.

* Ingredient Cart → Submit Order (CREATE\_ORDER\_ROLE)
* Auto PO generation by system agent (Vendor-wise)
* Approval Workflow:
  + Order Approval (APPROVE\_ORDER\_ROLE)
* Vendor Interaction:
  + Acknowledgement, Pricing, Fulfilment
* Order Tracking & Updates – Create New order for Partial fullfilled Orders by vendor.
* Order Receipt & Dispute Management (missing items)
* Return Management:
  + Request, Approval, Dispatch
* 🔁 Reorder Suggestion Engine (based on usage and stock)

**🧑‍💼 4. Vendor Action UI**

**Purpose:** Vendor-facing portal for order fulfilment lifecycle.

* Accept (Full/Partial), Reject, or Update Orders
* Dispatch management with status (Packed, In Transit, etc.)
* Access to:
  + Pending Orders
  + Order/Return Status
  + Payment Updates
* Return Acknowledgement
* Delivery Confirmation

**🔁 5. Internal Order Transfer Tracking**

**Purpose:** Manage inter-branch or warehouse transfers.

* Create internal orders (source → destination) branch / Warehouse
* Track ongoing and past internal transfers
* Transfer receipts and validations

**🧾 6. Vendor Management (Branch Manager Level)**

**Purpose:** Localized vendor database and performance tracking.

* CRUD Operations for Vendors
  + Status: Active, Blocked, Inactive, Priority
* Ingredient/Product to Vendor Mapping
* Vendor-specific history reports (orders, returns)
* Vendor Payment Advice Report

**👥 7. User Management System (Admin)**

**Purpose:** Role-based user access and profile management.

* User Onboarding : User Profile : email, phone, photo, and role assignment by admin.
* Role Creation:
  + Branch Manager, Store Manager, Store Assistant, Delivery Assistant, Admin, Super Admin, Vendor, Employee
* RBAC Implementation:
  + Permission mapping to roles