**Detailed Module & Subsystem Designs**

**Purpose**: Breaks down each IHOMS module into internal components with logic, data structures, and external interface specifications.

**Examples**:

**a. Case Management Subsystem**

* Intake forms, case updates, referral workflows, incident linking
* Status transitions: Open → Investigation → Action → Closed
* Role access: Caseworker, Field Supervisor, Cluster Coordinator

**b. Logistics Management**

* Inventory tracking, warehouse ops, fleet assignment
* Integration with GPS trackers and supply chain ERP
* Route optimization API and alerts on shipment delays

**c. Donor Reporting**

* Custom dashboard templates by donor
* Funding impact calculations and KPI mapping
* Export functions: PDF, XLSX, API feeds to donor platforms

**d. User Access**

* Role-based Access Control (RBAC)

Admin console for account provisioning and audit logs