Core Modules & System Features

1. M&E Project Design Module

- **User Management Table**

    - Manage users: Username, Email, Position, Access Level

- **Indicator Management Table**

    - Define indicators: Code, Name, Definition

    - Disaggregates: Gender, Age Group, Location, Disability

    - Types: Standard or Custom

    - Data Type: Text, Numeric, Percentage

    - Sector: WASH, Protection, etc.

- **Projects Table**

    - Project info: Title, Dates, Owner, Donor, Outputs, Location, Partners

    - Linked with indicators and M&E modules

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2. M&E Project Management Module (Project-Level)

- **Indicator Monitoring Plan (IMP)**

    - Result Chain: Impact → Output

    - Indicator, Means of Verification, Assumptions, Baselines, Targets

    - Auto-generates **Logical Framework** (exportable)

- **Indicator Tracking Table (ITT)**

    - Tracks indicator performance vs. targets

- Views: Monthly, Quarterly, Annually, Life of Project

- Auto-calculations: % Achieved, Gender, Age, Disability breakdowns

- **Beneficiary Database**

  - Captures individual-level data with duplicate checks

  - National ID/UNHCR card validation

- **Annual Work Plan Table**

  - Output/Activity, Target, Budget (USD/EGP), Expenditure, Progress

- **DQA Table (Data Quality Assessment)**

  - Auto-generated per project, annual reminder

  - Fields: Question, Yes/No, Comments

- **Calendar**

  - Gantt-chart view with timelines, links to data collection forms

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3. ILO Management Module (Org-Level Consolidation)

- **Aggregated ITT Table**

  - Consolidates project-level indicators for organizational reporting

- **General Annual Work Plan**

  - Consolidated view with additional fields (delivery rate, budget)

- **Project Tracker**

  - Full project status with thematic focus, partners, budget, dates

- **ILO-Level Beneficiary Database**

  - Consolidated + per project, flagged duplicates

- **General Calendar**

    - Includes all project M&E activities

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4. Reporting & Visualization

- **Real-Time Dashboard**

    - Visuals: Pie charts, line graphs, bar charts, maps, pivot tables

    - Filters: Theme, Partner, Project, Year, Location

    - Export: PDF / Excel

System Architecture & Relationships

- Tables are **interlinked** for seamless data flow:

    - Indicator → IMP → ITT → Dashboard

    - Project → IMP / Work Plan / Beneficiaries

- Logical relationships ensure:

    - Data validation

    - Real-time updates across modules

    - Auto-generation of reports and visualizations

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Technical Infrastructure (for Developers)

- **Recommended Tech Stack (not limited to):**

  - Backend: Python Django / Node.js

  - Frontend: Modern responsive design (mobile-ready)

  - Database: PostgreSQL or MS SQL Server

  - Hosting: Preferably Cloud (AWS, Azure); On-premises option supported

- **Security Features:**

  - TLS 1.3 for data in transit

  - AES-256 for data at rest

  - RBAC (role-based access)

  - MFA for high-level users

  - Compliance with ILO Data Protection Policies

- **System Optimization:**

  - Load balancers

  - Daily backups

  - Performance monitoring

  - Auto-scaling infrastructure for cloud

Other Functional Aspects

- Duplicate checks for beneficiary entries

- Auto-reminders (e.g. DQA Table updates)

- Exportable documents (PDFs of logical frameworks, work plans)

- Fully role-based user interfaces

- Mobile and browser responsive design

- ILO color palette adherence: Blue (#1E2DBE) & White (#FFFFFF)