KogiExportHub ASP.NET MVC Development Plan

Core Structure

- Project Type: ASP.NET Core MVC

- Architecture: Layered (Presentation, Business, Data)

- Data Access: Entity Framework Core (SQL Server)

- Authentication: ASP.NET Identity with Role-based access

- Roles: Admin, Aggregator/TradeBroker, Farmer, Miner, Investor, Technician, GovernmentOfficial

Shared Models (Used Across Features)

- UserProfile

- Location

- ProductCategory

Feature 1: Buyer-Seller Marketplace

- Models: Product, Transaction

- Controllers: MarketplaceController, TransactionController

- Views: ProductList, ProductDetails, Checkout, TransactionHistory

Feature 2: Infrastructure Proposal and Funding

- Models: InfrastructureProposal

- Controllers: InfrastructureController, FundingController

- Views: SubmitProposal, MyProposals, AdminApproval

Feature 3: Artisanal Mining Formalization

- Models: MinerProfile

- Controllers: MiningController

- Views: RegisterMiner, MinerDashboard, MiningStats

Feature 4: Notification System

- Models: Notification

- Controllers: NotificationController

- Views: Notifications (partial view on layout)

Feature 5: Foreign Investor Partnerships

- Models: InvestmentOpportunity

- Controllers: InvestmentController

- Views: InvestmentList, InvestmentDetails, SubmitInterest

Feature 6: Role-Based Dashboards

- Controllers: DashboardController with role-specific methods

- Views: Dashboard (renders sections dynamically based on user role)

Authentication & Authorization

- ASP.NET Identity integrated for login, registration, and role management

- Shared layout with conditional rendering based on role

Shared Content

- Shared Views: Layout, Notifications (partial), Sidebar (partial)

- Shared Controllers: AccountController, ProfileController

Suggested Folder Structure

/Controllers

/Models

/Views

  /Marketplace

  /Infrastructure

  /Mining

  /Notifications

  /Investment

  /Shared

/Migrations

/Services

Next Steps

1. Scaffold Identity and customize login/roles

2. Build core models and migrations

3. Start with Marketplace (core revenue) -> Infrastructure -> Mining -> Notifications -> Investment

4. Deploy on Azure or local IIS with CI/CD integration