# AirNir – Generative AI Platform

## Phase 3 Documentation

### Project Structure

/AirNir  
├── Library  
│ ├── ArNir.Core → Entities, DTOs, Config  
│ ├── ArNir.Data → DbContext, EF Migrations  
│ ├── ArNir.Service → Business logic (DocumentService, etc.)  
├── Presentation  
│ ├── ArNir.Admin → ASP.NET Core MVC (AdminLTE UI)  
│ ├── ArNir.Frontend → ASP.NET Core MVC (User-facing)  
│ ├── ArNir.WebAPI → API layer (future React/Angular integration)  
├── sql → SQL scripts

### Phase 3.1 – Document Ingestion & Chunking

- Goal: Structured ingestion of TXT, PDF, DOCX, Markdown files.  
- Entities: Document + Chunk with relationships.  
- Validation rules driven by appsettings.json (AllowedTypes, MaxFileSize).  
- Business logic in DocumentService with DTO mapping.  
- Admin UI (Upload, Edit, Delete, Details, List) using AdminLTE & Bootstrap 5.  
- Preview: PDF inline, TXT chunks, DOCX download fallback.  
- Client-side + backend validation synced with config.  
- Storage: Metadata + chunks in SQL Server, original files in wwwroot/uploads.  
- Outcome: Robust ingestion pipeline, documents prepared for embeddings.

### Architecture Diagram (Phase 3.1)

