**.NET Project Setup**

🕒 Each lecture is 1.5 hours.
📅 Weekly 2 lectures (around 5 weeks total).

# Lecture 1: Solution & Project Structure Setup

⏰ Duration: 1.5 hours | 📅 Week 1

Create initial solution with multiple projects (Domain, Application, Infrastructure, API, UI).
Apply SOLID/Clean Architecture/Onion/Modular folder structure/N-Layer.

# Lecture 2: Project Deployment/Hosting

⏰ Duration: 1.5 hours | 📅 Week 1

Shared hosting/cloud deployment strategies.
Basics of publishing and hosting .NET apps.

# Lecture 3: Configuration Management

⏰ Duration: 1.5 hours | 📅 Week 2

Centralize configurations using appsettings.json, secrets.json, environment variables.
Best practices for managing configurations across environments.

# Lecture 4: Dependency Injection (DI) Container Setup

⏰ Duration: 1.5 hours | 📅 Week 2

Register services, repositories, DbContexts in Program.cs.
Define modular service registration.

# Lecture 5: Database & Migrations Setup

⏰ Duration: 1.5 hours | 📅 Week 3

Choose EF Core or Dapper.
Setup initial database migration and connection string strategy.

# Lecture 6: Authentication & Authorization Setup

⏰ Duration: 1.5 hours | 📅 Week 3

Configure Identity / IdentityServer or external OAuth.
Implement basic roles and policies.

# Lecture 7: API Standards Setup

⏰ Duration: 1.5 hours | 📅 Week 4

Add Swagger/OpenAPI.
Configure versioning and global exception handling middleware.

# Lecture 8: Logging & Monitoring Setup

⏰ Duration: 1.5 hours | 📅 Week 4

Add Serilog + sinks (console, file, Application Insights).
Define log format and correlation IDs.

# Lecture 9: Front-End/Client Integration Setup

⏰ Duration: 1.5 hours | 📅 Week 5

Bootstrap React/Angular/Blazor project.
Configure API base URL and authentication provider.