Architecture (N-Layer)

WebMVC

- EducationalPortal.WebMVC (Models, Views, Controllers)

Business

- EducationalPortal.Logic (DTO objects, business logic)

Infrastructure

- EducationalPortal.Data (db models, migrations)
- EducationalPortal.Repo (abstract data access)

Main Services

Repositories

- BaseRepo
- UserRepo
- SkillRepo
- CourseRepo
- BookRepo
- VideoRepo
- ArticleRepo

UI Actions -> URL Endpoints

CoursesController

- Index, Create, Edit, Delete, Details, Enroll, Progress, AddMaterial, AddSkill

UsersController

- Index, Create, Edit, Details, Delete, MySkills, MyCourses

SkillsController

- Index, Create, Edit, Details, Delete

MaterialsController

- Index, Create, Details, Edit, Delete

Detailed Endpoints

CoursesController

- GET /Courses/Index -- list all courses
- GET /Courses/Details/{id} -- show course details
- GET /Courses/Create -- show form to create course
- POST /Courses/Create -- save new course
- GET /Courses/Edit/{id} -- show form to edit course
- POST /Courses/Edit/{id} -- update course
- POST /Courses/Delete/{id} -- delete course
- POST /Courses/Enroll/{id} -- enroll user in a course
- POST /Courses/AddMaterial/{courseId} -- attach material to course
- POST /Courses/AddSkill/{courseId} -- attach skill to course

UsersController

- GET /Users/Index -- list all users
- GET /Users/Details/{id} -- show user details
- GET /Users/Create -- show form to create user
- POST /Users/Create -- save new user
- GET /Users/Edit/{id} -- show form to edit user
- POST /Users/Edit/{id} -- update user
- POST /Users/Delete/{id} -- delete user
- GET /Users/MySkills/{id} -- show user skills & levels
- GET /Users/MyCourses/{id} -- show user's enrolled/active/completed courses

SkillsController

- GET /Skills/Index -- list all skills

- GET /Skills/Create -- show form to create skill

- POST /Skills/Create -- save new skill

- POST /Skills/Edit/{id} -- update skill

- POST /Skills/Delete/{id} -- delete skill

MaterialsController

- GET /Materials/Index -- list all materials

- GET /Materials/Details/{id} -- show material details

- GET /Materials/Create/Video -- show form to create material (video)

- GET /Materials/Create/Book -- show form to create material (book)

- GET /Materials/Create/Article -- show form to create material (article)

- POST /Materials/Create/Video -- save new material (video)

- POST /Materials/Create/Book -- save new material (book)

- POST /Materials/Create/Article -- save new material (article)

- GET /Materials/Edit/{id} -- show form to edit material

- POST /Materials/Edit/{id} -- update material

- POST /Materials/Delete/{id} -- delete material