

News Website Content Management System

Our proposed project seeks to create a newspaper website “CMS” from scratch and is based on the concepts of “**building and consuming web services.**”

Our News CMS allows users to manage a website with recurrent publications (blogs, news, articles, multimedia), etc. with no programming knowledge, it allows authors to create, publish, and edit news and articles through a control panel "dashboard" protected by a subsystem for managing users and their access permissions.

The Project implementation will divide into two parts/ phases:

The first phase:

Building an ASP.NET Core Web API project with C# (Back-end or “server side”)

- **Features:**
 - Clean Architecture (**Unit of Work in Repository Pattern and Specification design pattern**)
 - ASP.NET Identity (Multi-User Permission Levels)
 - JSON web tokens (securely transmit information)
 - Paging, Filtering, Sorting & Searching
 - Handling errors and Exception global by middleware
 - Shaping the data to return with DTOs (Adding AutoMapper)

Data Handling

We will use **Entity Framework Core** as a modern object-database mapper for .NET and **LINQ** queries with **SQL Server**.

Image Handling and Processing

Resize and crop images, then store them in cloud storage (“**Cloudinary**”) and on the server(both)

The second phase:

Building Single Page Application with Angular (Front-end or “Client side”)

At this stage, the work will be divided into two parts. The first is the content management control panel. This part is protected and only those with permissions can access it. The second part is the public pages whose contents anonymous visitors can view.

- **Features:**
 - Rich UI (NG-ZORRO - component library)
 - Multilingual (Ngx-translate)
 - Search Engine Friendly (SEO)
 - Mobile Friendly(responsive)
 - Routing and route guard
 - Light and Dark Themes

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