18-10-2024

# Project Documentation

## Online Learning Platform : E-Learning



**Submitted by: Team1**

# Introduction

The Online Learning Platform is a web-based application designed to streamline the management of online courses and student enrollments. Built with ASP.NET Core, the platform allows users to browse available courses, enroll, and track their learning journey. The system incorporates key features like user authentication, ensuring that users can securely register, log in, and manage their course activities.

# Team Members

- **Kirollos Talaat Fahmy**

- **Ziad Elsayed Ibrahem**

- **Sara Mohamed Yassin**

- **Mohamed Elsayed Mohamed**

- **Mohamed Fouad Ghanim**

# Technologies

- ASP.NET Core for backend development
- MVC architecture for structure
- Entity Framework for database management
- User Authentication for security
- HTML & CSS For the Frontend Development

# Goals/Objectives

This part of the project plan outlines the objectives of the online learning platform to ensure smooth execution. Key objectives include:

- Develop a web-based platform for managing online courses and student enrollments.

- Build a course listing page where users can browse courses with detailed descriptions.

- Implement a course listing page with detailed descriptions.

- Enable users to enroll in courses.

- Build an admin dashboard for managing users.

- Set up user authentication for registration and login.

# Getting Started

This section provides detailed guidance on how to install and set up the E-Learning Platform project, which is built using ASP.NET Core MVC and Entity Framework. Follow the steps below to ensure a smooth installation process.

**1** Clone this Repository

Make Sure You Installed ASP.NET Core, Entity Framework and SQL Server **2**

**3** Restore the NuGet packages required for the project : EF , Tools and SQL Server

Update the connection string **4**

**5** Migrate and Update The Database

Build and Run The Project **6**

# System Requirements

To run this project, your system must meet the following minimum requirements:

- **Operating System:**
    - Windows 10 or later
    - macOS or Linux (with .NET Core installed)

- **Software:**
    - .NET Core SDK 6.0 or later
    - SQL Server (for the database, can use LocalDB for development)
    - Visual Studio 2022 (recommended, for development purposes)

- **Database:**
    - SQL Server or SQL Server Express

- **Web Browser:**
    - Chrome, Firefox, Edge, or any modern web browser

# Roles

There are three main user roles, each with defined responsibilities and permissions. These roles determine users' actions and access levels to various platform features.

| ROLE |
| --- |
| **ADMIN** |
| **INSTRUCTOR** |
| **STUDENT** |

# Admin

- Create, update, or delete user accounts (students and instructors).

- Assign roles (e.g., promoting a user to instructor).

- Manage the course catalog, including editing course details, categories, and materials.

- Configure system settings (e.g., authentication rules, enrollment policies).

- Full access to user, course, and platform management.

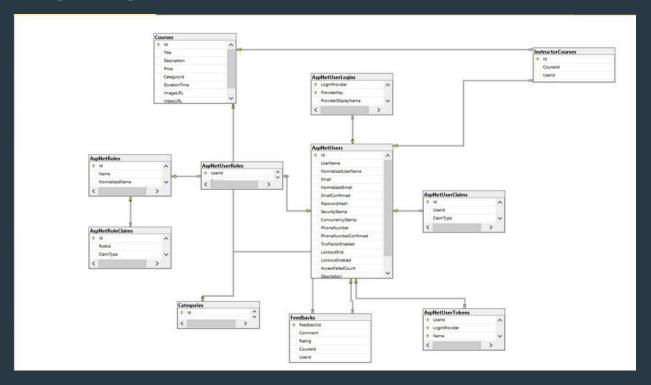- Can delete and modify any content on the platform.
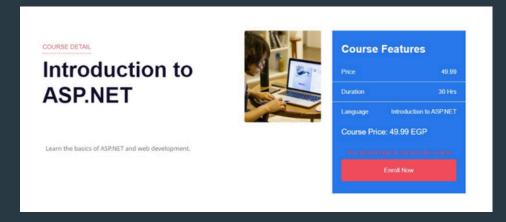
# Instructor

- Develop new courses and modify course content.

- Set course start and end dates.

- Access to manage only the courses they create or are assigned to.

- Can view and manage student progress in their courses.

- Can view their personal profile.

# Student

- Browse available courses and enroll in them.

- View personal progress in each enrolled course (e.g., assignments completed).

- Access course materials (videos, documents, etc.).

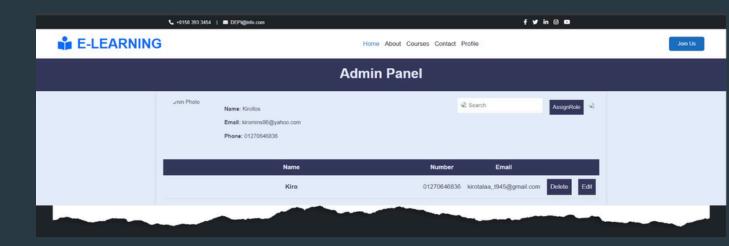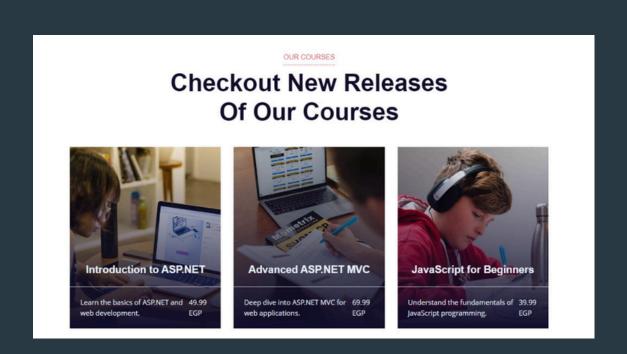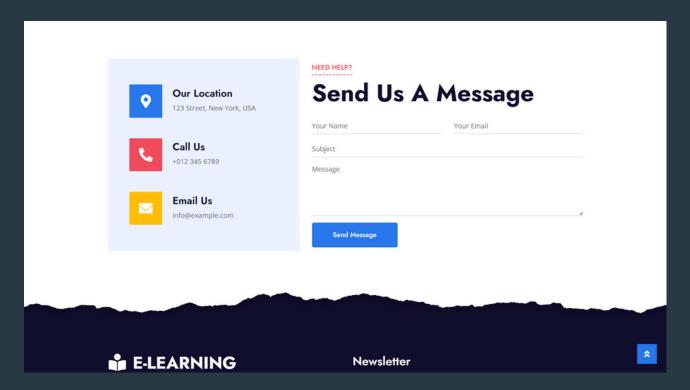- Can view only their personal profile and progress.

# Demo

# Demo

# Demo

# Special Thanks to ENG/Fatma Tolba