

# TRIBHUVAN UNIVERSITY Asian School of Management and Technology Gongabu, Kathmandu, Nepal

# A Project Report On Web-App Development using ASP.NET

#### **Submitted By:**

**SULAV SHRESTHA** 

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#### **Abstract**

The Online Course Management System is a comprehensive web-based platform designed to meet the growing demand for efficient and effective management of online courses. This project aims to provide instructors with a user-friendly interface for creating, managing, and delivering courses, while enabling students to easily enroll in courses, access course materials, submit assignments, and take quizzes.

By leveraging the power of C#/.NET, ASP.NET MVC, Entity Framework, and SQL Server, our system offers a seamless user experience with robust functionality. Instructors can effortlessly create and manage courses, upload course materials, create and grade assignments, and develop quizzes. Students can enroll in courses, access course materials, submit assignments, and take quizzes, all within a centralized and intuitive platform.

With a strong focus on user authentication and authorization, the system ensures that only authorized users have access to course-related content. Additionally, the platform includes progress tracking functionality, allowing students to monitor their course progress and stay engaged.

The proposed Online Course Management System will revolutionize the way courses are managed and delivered online. It enhances efficiency, eliminates administrative complexities, and improves the overall learning experience. By streamlining the course management process, this system empowers instructors to deliver high-quality education while providing students with a user-friendly and organized learning environment.

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## Introduction

With the advent of online learning, there is a growing demand for a centralized platform that enables instructors and students to manage courses online. Our proposed project aims to develop an online course management system that will provide instructors with a tool for creating, managing, and delivering courses, while allowing students to enroll in courses, access course materials, submit assignments, and take quizzes.

### **Problem Statement**

- 1. Inefficient Course Management: The absence of a centralized online course management system leads to inefficiencies in course creation, delivery, and administration. Instructors face challenges in organizing course materials, managing assignments and quizzes, and tracking student progress, resulting in time-consuming and error-prone manual processes.
- 2. Limited Access to Course Materials: Without a dedicated platform, students struggle to access course materials conveniently. Inconsistent distribution methods, such as email attachments or physical handouts, create barriers to learning, impeding students' ability to review materials, study effectively, and engage with the course content.
- 3. Lack of Progress Tracking: Without a reliable progress tracking system, students are unable to monitor their course progress effectively. This hinders their ability to self-assess, identify areas for improvement, and stay motivated, impacting the overall learning experience and potentially leading to lower student satisfaction and performance.
- 4. Fragmented User Management: The absence of a centralized user management system makes it difficult to efficiently manage user roles, permissions, and access. Instructors face challenges in creating, editing, and deleting user accounts, and students may encounter difficulties enrolling in courses or accessing the appropriate materials.
- 5. Tedious Assignment and Quiz Management: The absence of an automated system for managing assignments and quizzes adds complexity and inefficiency to the grading process. Instructors struggle with manual grading, record-keeping, and providing timely feedback, while students experience delays in receiving grades and feedback, hindering their progress and learning outcomes.
- 6. Security and Authentication Risks: Without a robust authentication and authorization system, there is a risk of unauthorized access to course materials, student data, and administrative functions. Ensuring secure access and protecting sensitive information is crucial for maintaining the integrity and privacy of the online course environment.

The proposed Online Course Management System aims to address these problems by providing a centralized platform that streamlines course creation, delivery, and administration, improves access to course materials, enables progress tracking, enhances user management, simplifies assignment and quiz management, and ensures secure access to protect data and maintain privacy.

# Objective

To provide instructors with a user-friendly interface for creating, managing, and delivering courses

To provide students with a centralized platform for enrolling in courses, accessing course materials, submitting assignments, and taking quizzes

To improve the efficiency and effectiveness of the course management process

To enhance the learning experience for students