# BLOGGING AND CONTROL MANAGEMENT SYSTEM

# **Submitted by:**

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**Instructor Details:** 

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#### PROBLEM DEFINITION AND OBJECTIVES

### **Problem Statement:**

Many bloggers struggle to find a platform with both powerful editing tools and efficient content management.

## **Objectives:**

- Enable bloggers to create, edit, and publish posts easily.
- ➤ Provide SEO optimization features for better search rankings.
- Allow admins to moderate content efficiently.

## FRONTEND & BACKEND ARCHITECTURE

## **Technology Stack Overview:**

- > Frontend: React
- ➤ Backend: ASP.NET Core Web API
- ➤ Database: SQL Server with Entity Framework Core

## **COMPONENT BREAKDOWN & API DESIGN**

## **API Design:**

- ➤ Endpoints for user authentication, blog management, SEO suggestions
- > Authentication via JWT

## **Challenges faced:**

- ➤ Handling secure authentication.
- ➤ Database normalization.
- > SEO algorithm integration.

## **Solutions:**

- ➤ Used JWT for authentication.
- ➤ Optimized queries with indexes.

> Created custom SEO analyzer service.

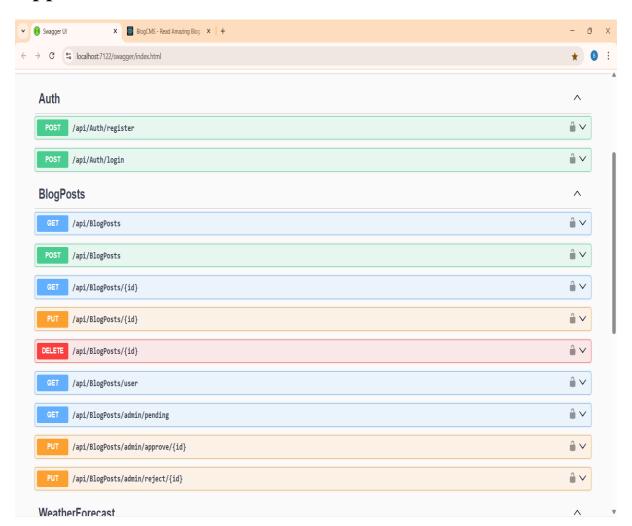
## **Performance Evaluation:**

- Lighthouse performance score (frontend).
- ➤ API response times (backend).

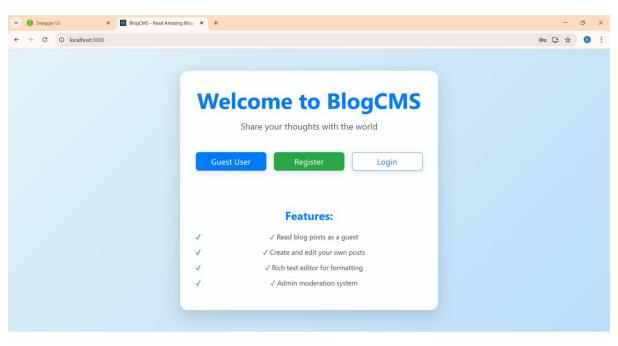
#### **User Roles**

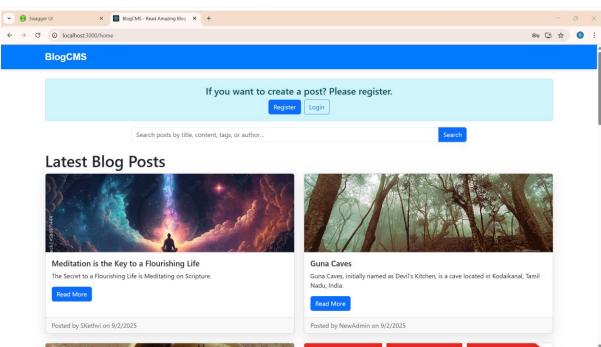
- 1. Guest Users: Can browse published blog posts.
- 2. **Registered Bloggers**: Can create, edit, and manage their blog posts.
- 3. Admins: Can moderate content and manage users.

## **Appendices**



#### **Guest User:**

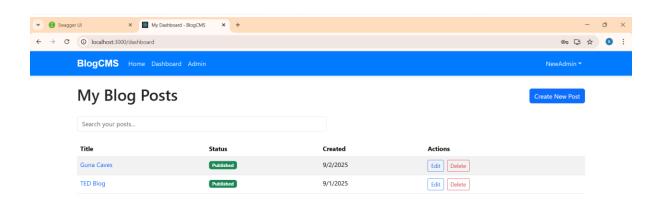


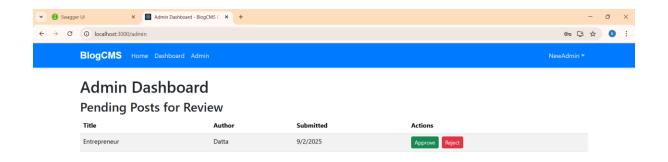


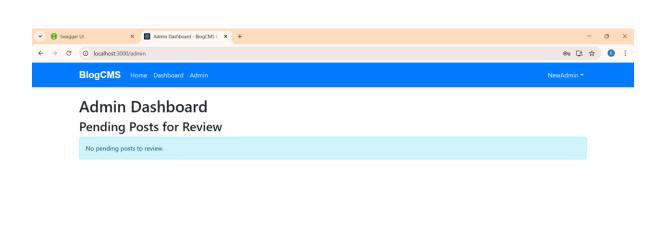
#### **Admin:**

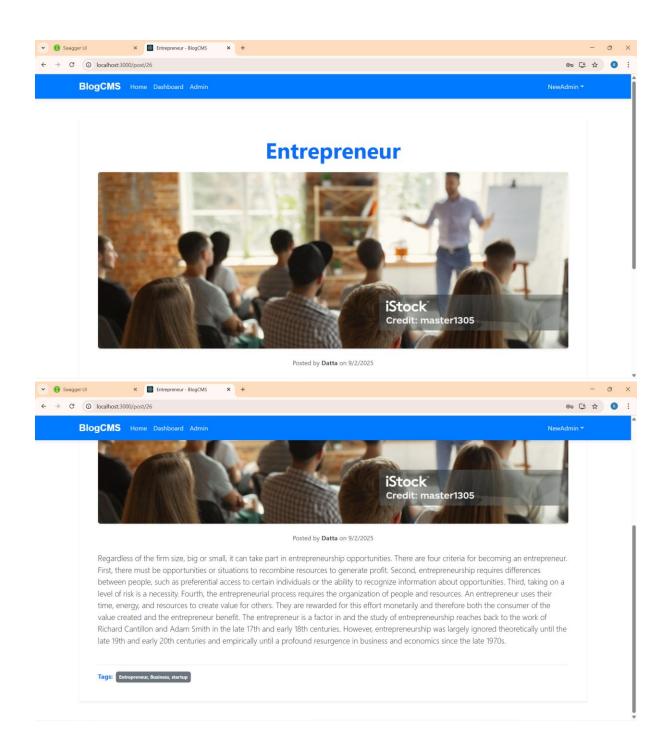


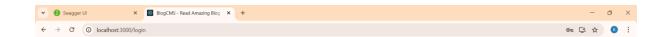




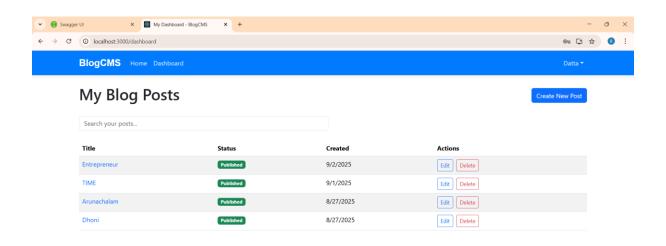




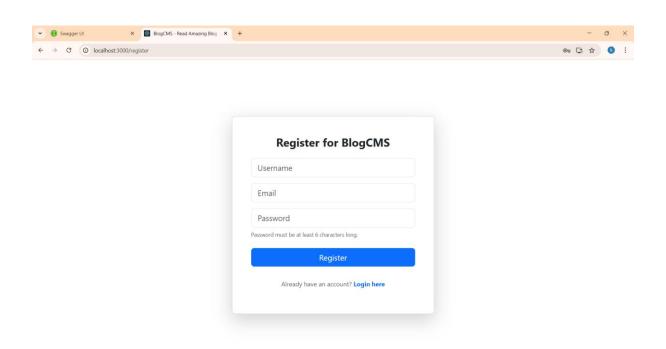


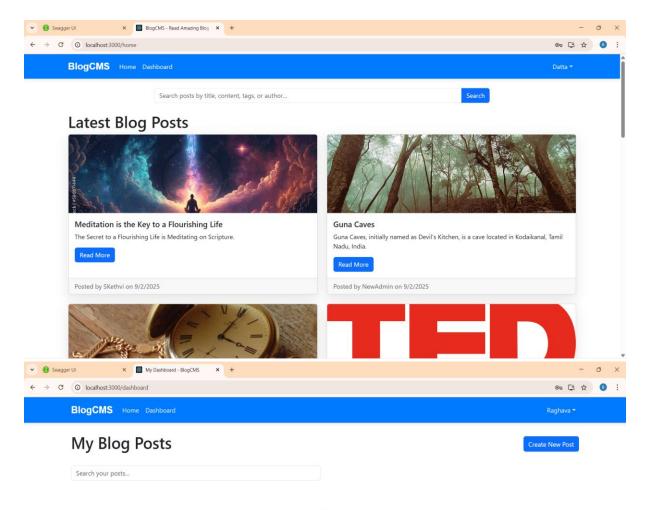






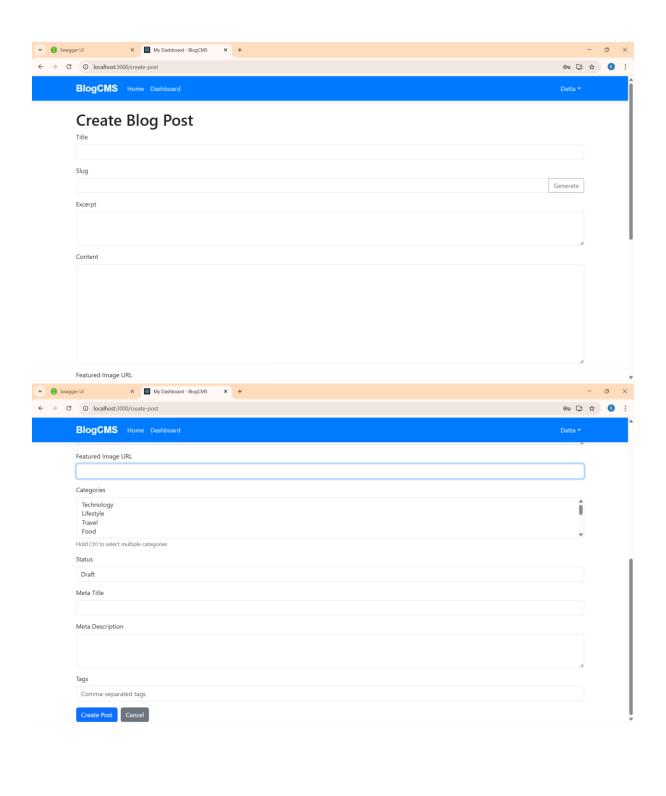
#### **User:**





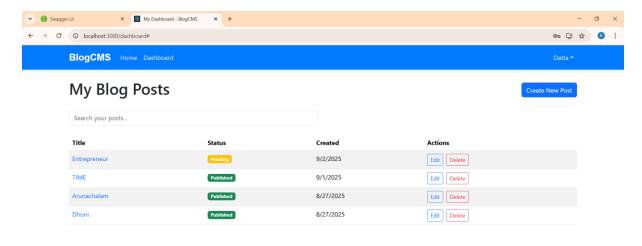
You haven't created any blog posts yet.

Create Your First Post

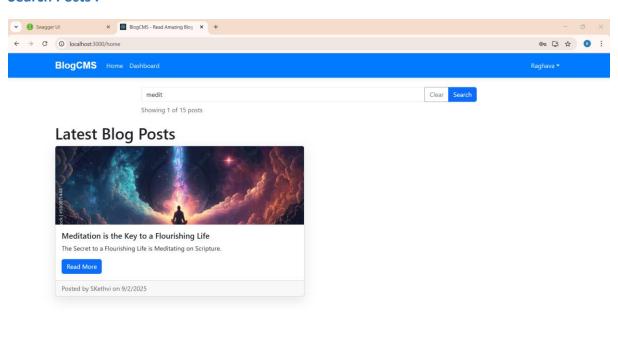




#### Admin giving approval for user's blog:-



#### **Search Posts:-**



## **SUMMARY OF PROJECT COMPLETION:**

A Blogging and Content Management System (CMS) is a webbased platform designed to create, manage, and publish digital content efficiently. It provides users with an intuitive interface to post blogs, manage articles, optimize content for search engines (SEO), and control user roles without requiring deep technical knowledge.