BLOGGING AND CONTROL MANAGEMENT SYSTEM

Submitted by:

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Instructor Details:

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PROBLEM DEFINITION AND OBJECTIVES

Problem Statement:

Bloggers often face difficulties in finding a single platform that combines advanced editing capabilities with reliable content management features.

Objectives:

- ❖ Provide a user-friendly way for bloggers to write, edit, and publish their posts.
- ❖ Integrate SEO tools to improve search engine rankings.
- ❖ Ensure administrators can review and regulate content effectively.

FRONTEND & BACKEND ARCHITECTURE

Technology Stack :

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

COMPONENTS & API STRUCTURE

API Design:

- ❖ Endpoints for login/authentication, blog operations, and SEO support.
- ❖ Secure authentication using JWT

Challenges faced:

- ❖ Ensuring secure authentication.
- ❖ Designing a normalized database structure.

❖ Integrating SEO-based algorithms.

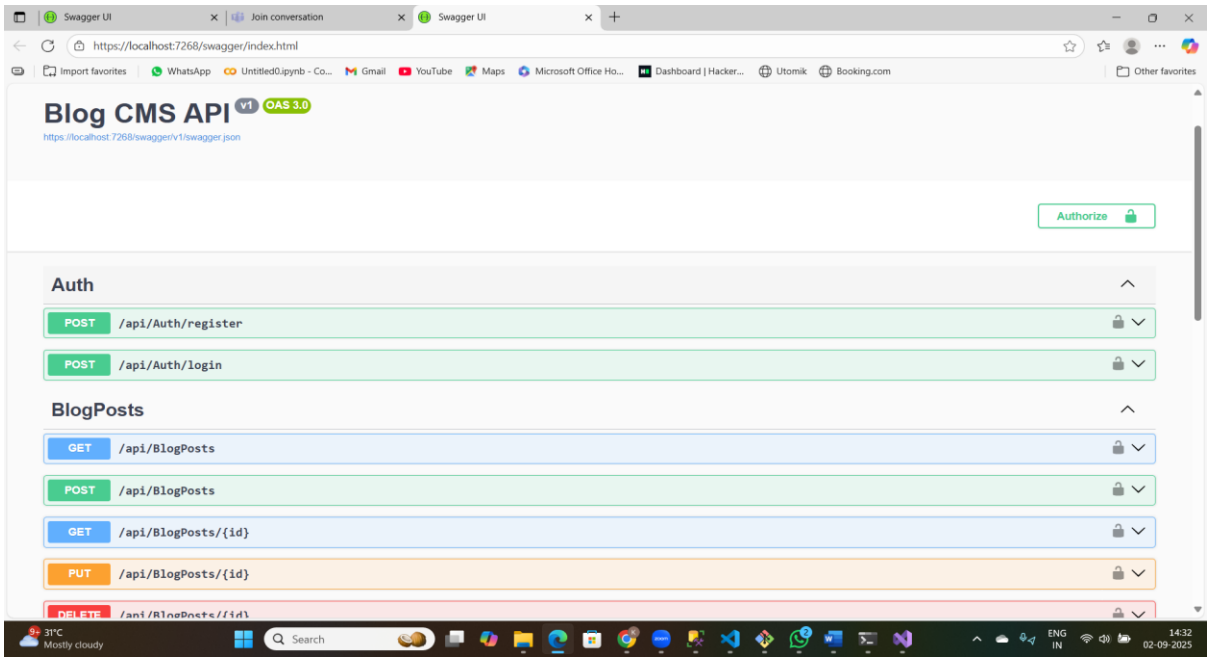
Solutions:

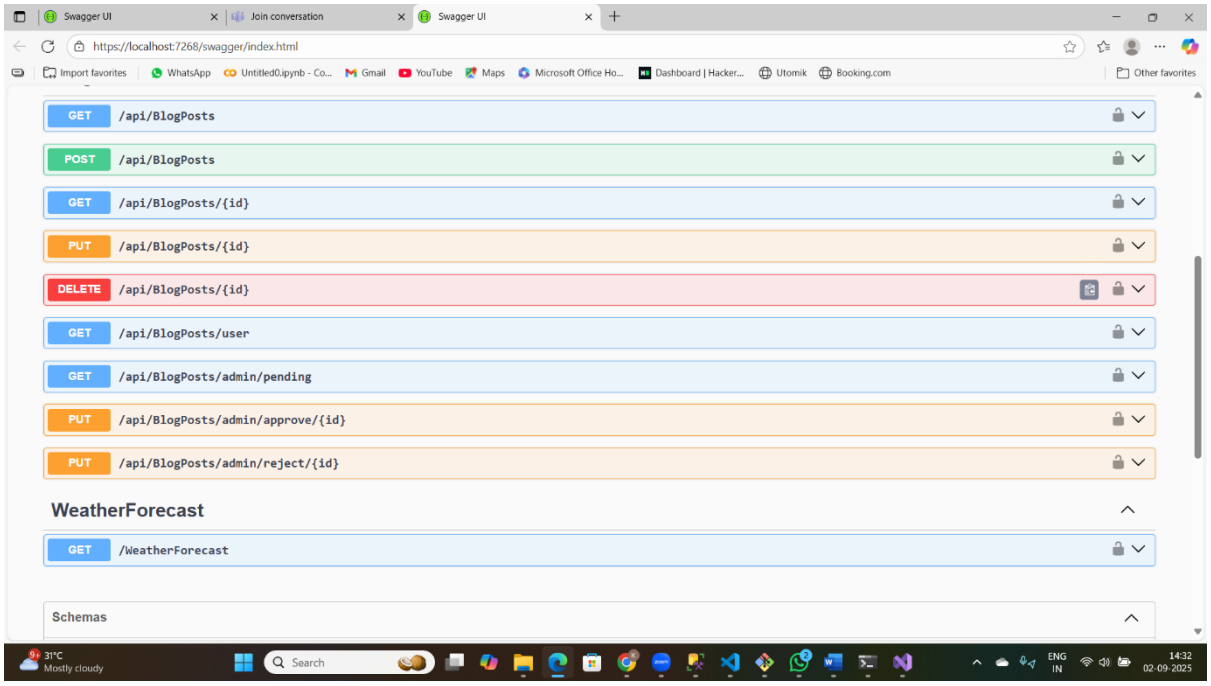
❖ Implemented JWT tokens for authentication and authorization.
❖ Improved query efficiency with indexing.
❖ Built a custom SEO analysis service.

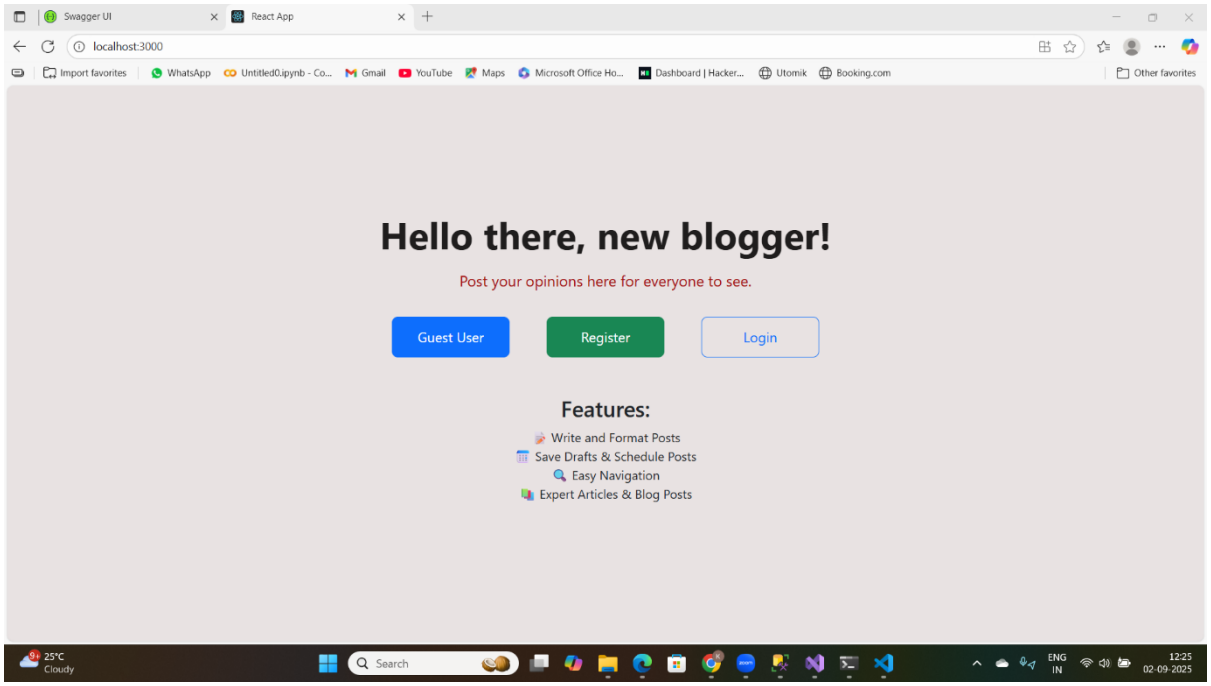
Performance Evaluation:

❖ Measured frontend speed using Lighthouse performance metrics.
❖ Checked backend efficiency through API response times.

Appendices

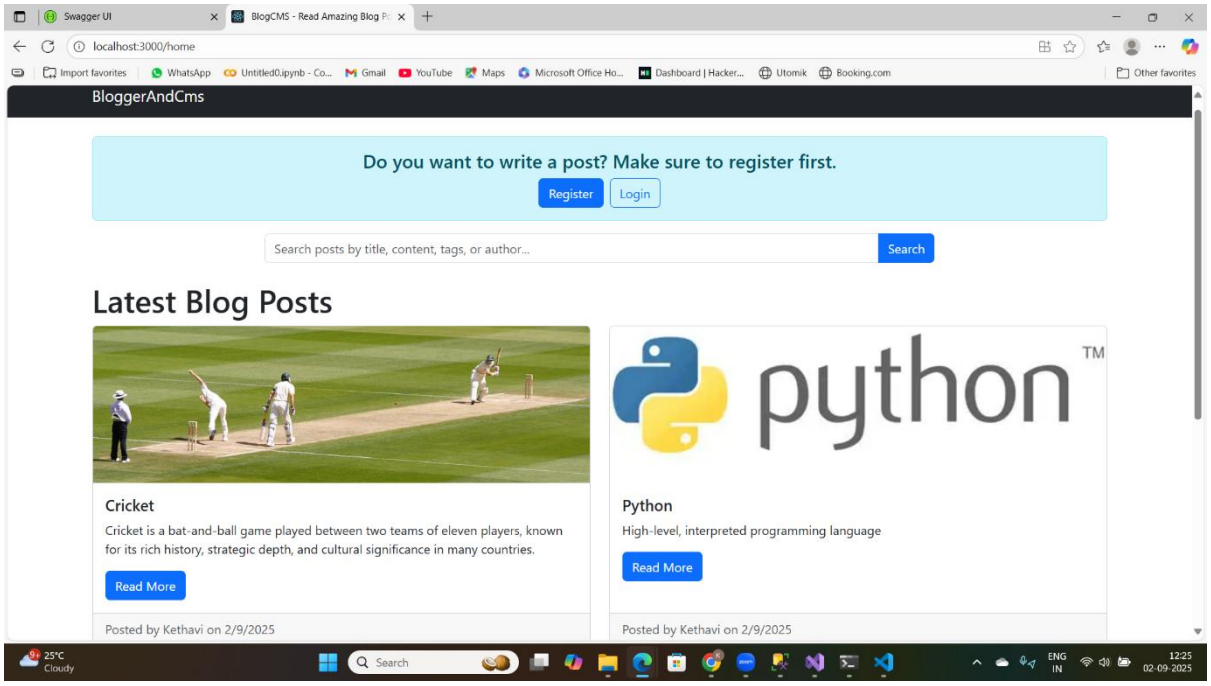




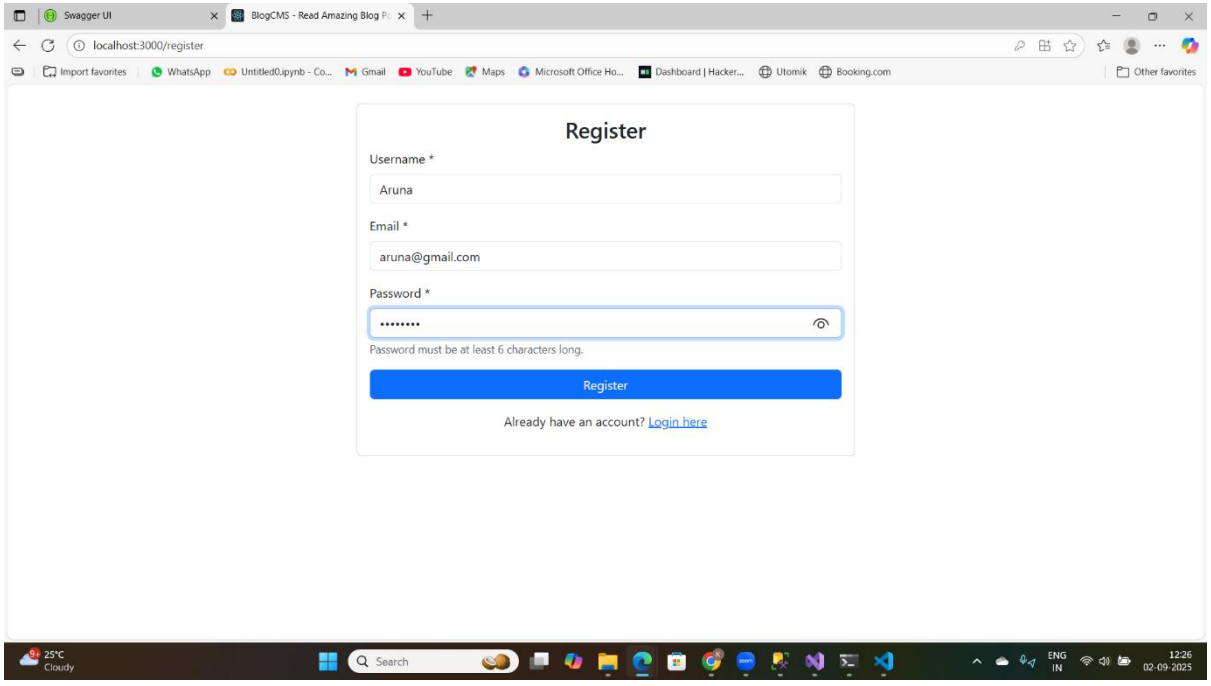


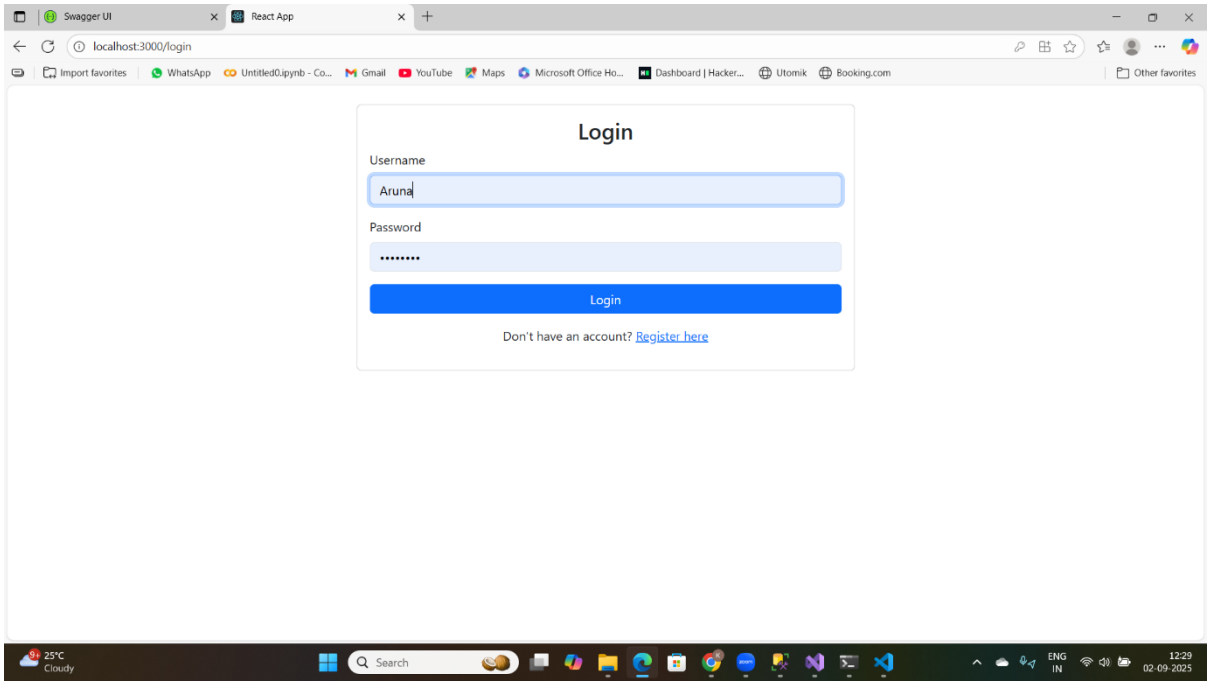
Guest User:

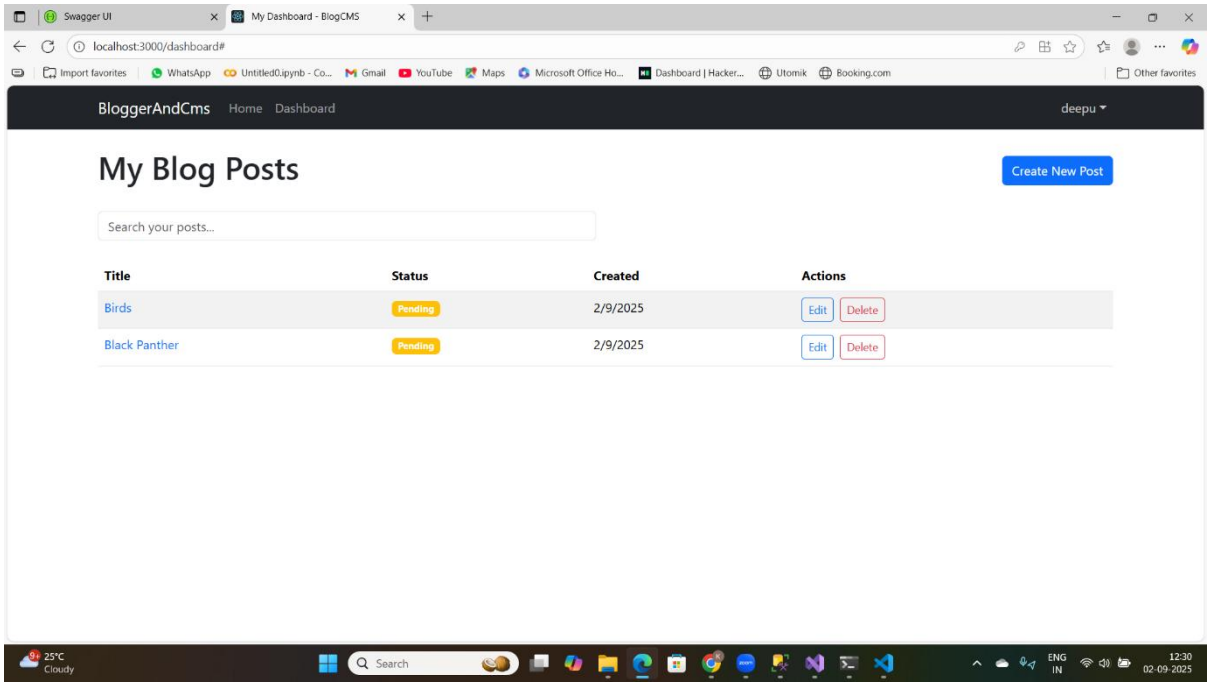
Can just view and search posts

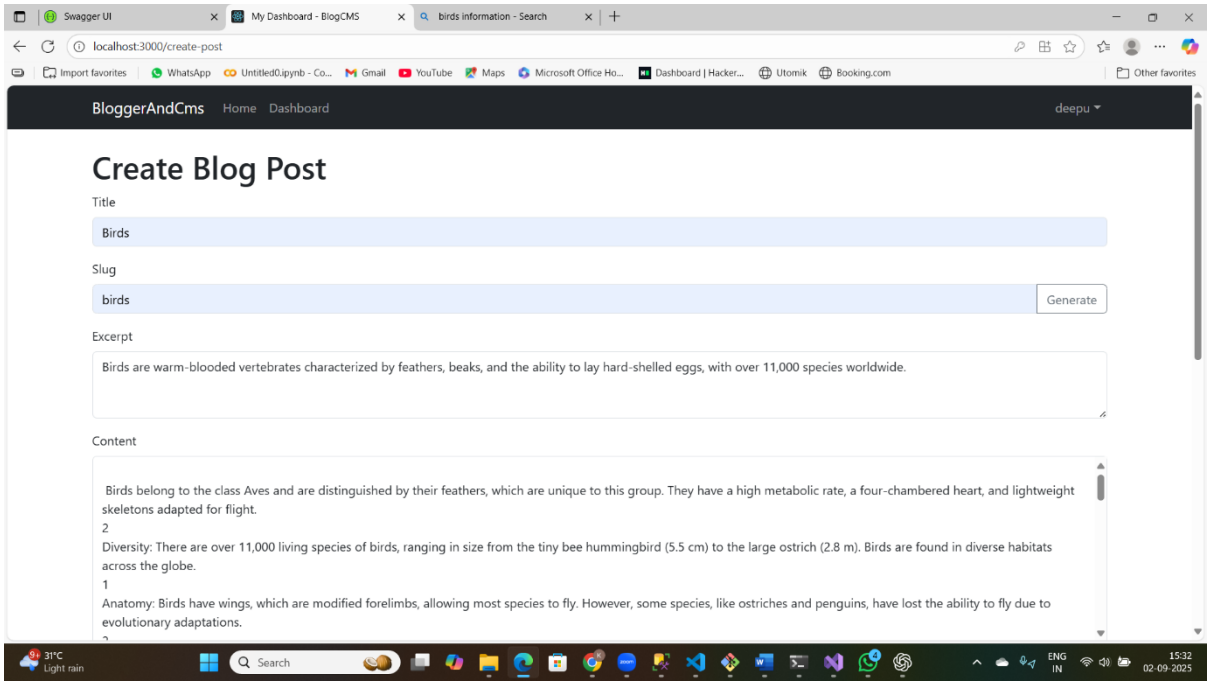

Swagger UI
BlogCMS - Read Amazing Blog P
localhost:3000/home
BloggerAndCms
Do you want to write a post? Make sure to register first.
Register
Login
Search posts by title, content, tags, or author...
Search
Latest Blog Posts
Cricket
Cricket is a bat-and-ball game played between two teams of eleven players, known for its rich history, strategic depth, and cultural significance in many countries.
Read More
Posted by Kethavi on 2/9/2025
python
Python
High-level, interpreted programming language
Read More
Posted by Kethavi on 2/9/2025

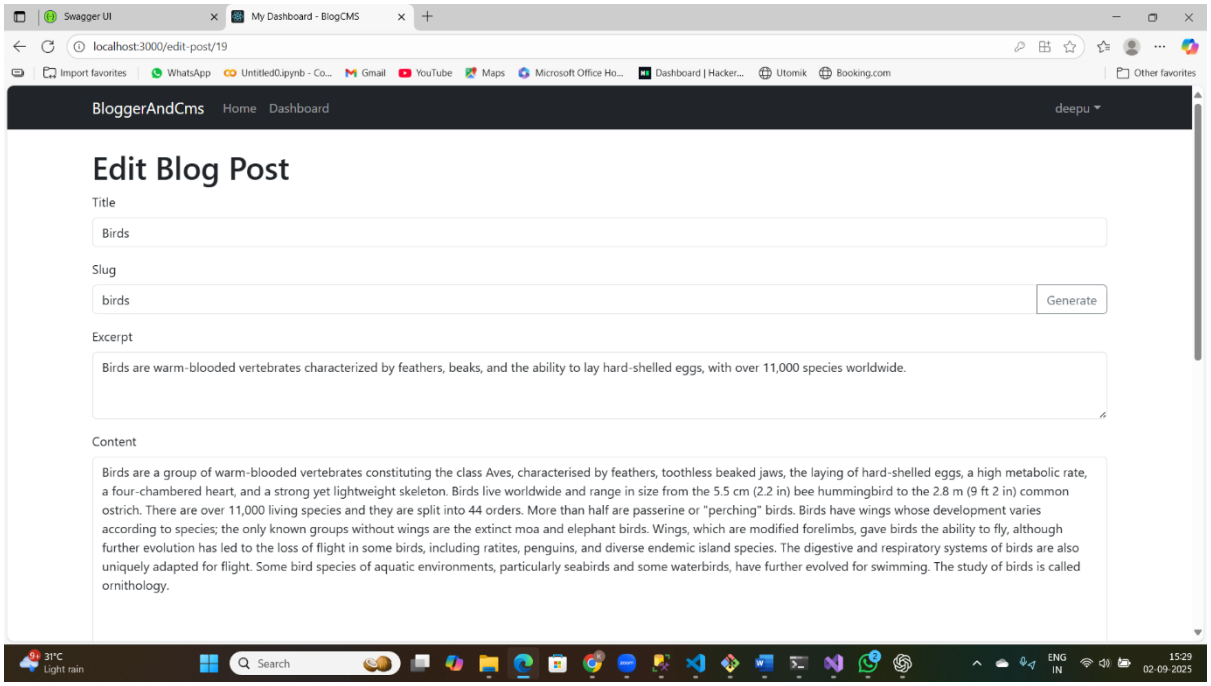
User:


Swagger UI
BlogCMS - Read Amazing Blog P
localhost:3000/register
Register
Username *
Aruna
Email *
aruna@gmail.com
Password *
Password must be at least 6 characters long.
Register
Already have an account? Login here

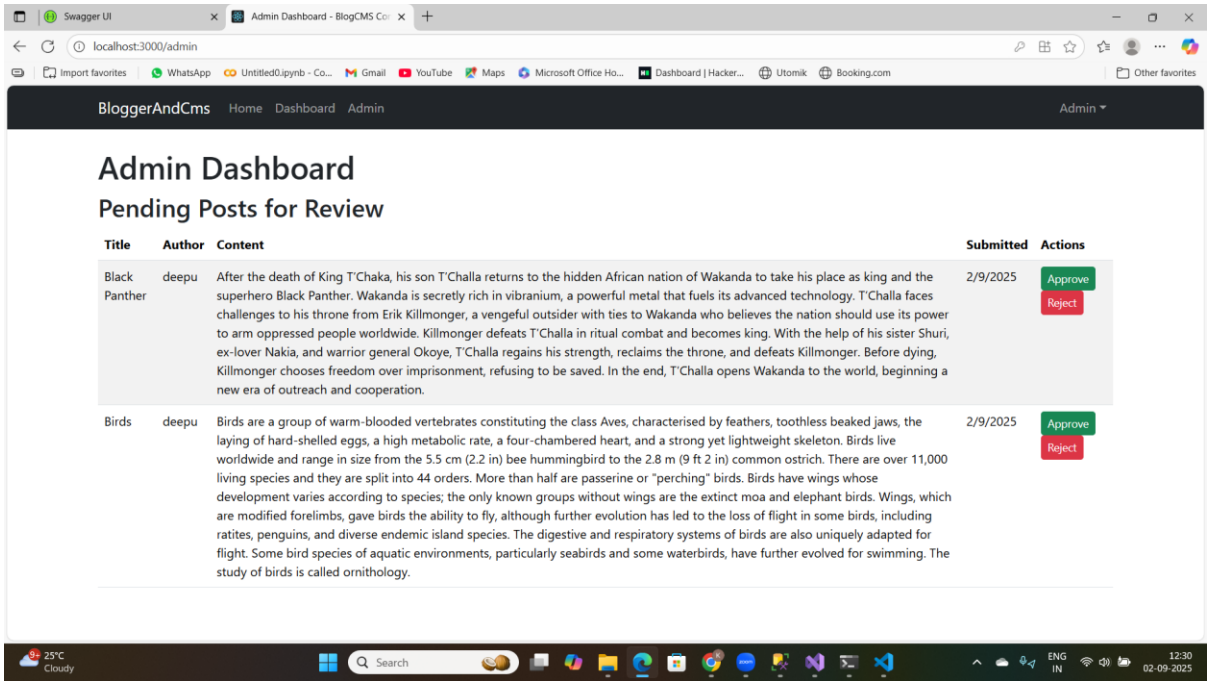

Swagger UI
React App
localhost:3000/login
Login
Username
Aruna
Password
Login
Don't have an account? Register here

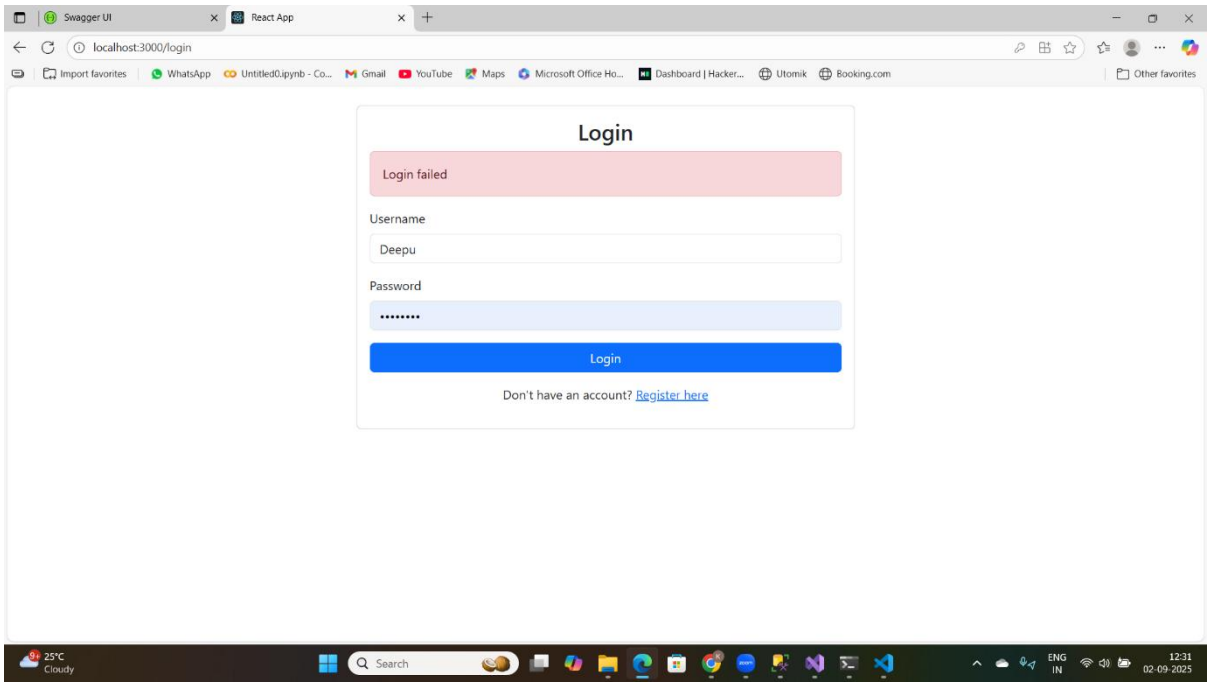

Swagger UI
My Dashboard - BlogCMS
localhost:3000/dashboard#
BloggerAndCms
Home
Dashboard
deepu
My Blog Posts
Create New Post
Search your posts...
Title
Status
Created
Actions
Birds
Pending
2/9/2025
Edit
Delete
Black Panther
Pending
2/9/2025
Edit
Delete





Admin giving approval for user’s blog.


Swagger UI
Admin Dashboard - BlogCMS
localhost:3000/admin
BloggerAndCms
Home
Dashboard
Admin
Admin
Admin Dashboard
Pending Posts for Review
Title
Author
Content
Submitted
Actions
Black Panther
deepu
After the death of King T'Chaka, his son T'Challa returns to the hidden African nation of Wakanda to take his place as king and the superhero Black Panther. Wakanda is secretly rich in vibranium, a powerful metal that fuels its advanced technology. T'Challa faces challenges to his throne from Erik Killmonger, a vengeful outsider with ties to Wakanda who believes the nation should use its power to arm oppressed people worldwide. Killmonger defeats T'Challa in ritual combat and becomes king. With the help of his sister Shuri, ex-lover Nakia, and warrior general Okoye, T'Challa regains his strength, reclaims the throne, and defeats Killmonger. Before dying, Killmonger chooses freedom over imprisonment, refusing to be saved. In the end, T'Challa opens Wakanda to the world, beginning a new era of outreach and cooperation.
2/9/2025
Approve
Reject
Birds
deepu
Birds are a group of warm-blooded vertebrates constituting the class Aves, characterised by feathers, toothless beaked jaws, the laying of hard-shelled eggs, a high metabolic rate, a four-chambered heart, and a strong yet lightweight skeleton. Birds live worldwide and range in size from the 5.5 cm (2.2 in) bee hummingbird to the 2.8 m (9 ft 2 in) common ostrich. There are over 11,000 living species and they are split into 44 orders. More than half are passerine or "perching" birds. Birds have wings whose development varies according to species; the only known groups without wings are the extinct moa and elephant birds. Wings, which are modified forelimbs, gave birds the ability to fly, although further evolution has led to the loss of flight in some birds, including ratites, penguins, and diverse endemic island species. The digestive and respiratory systems of birds are also uniquely adapted for flight. Some bird species of aquatic environments, particularly seabirds and some waterbirds, have further evolved for swimming. The study of birds is called ornithology.
2/9/2025
Approve
Reject
25°C
Cloudy
Search
ENG
IN
12:30
02-09-2025


Swagger UI
React App
localhost:3000/login
Login
Login failed
Username
Deepu
Password
Login
Don't have an account? Register here
25°C
Cloudy
Search
ENG
IN
12:31
02-09-2025

PROJECT SUMMARY:

The Blogging and Content Management System is a web application created to streamline digital publishing. It enables content creators to write and manage blogs with ease while offering built-in SEO features for higher visibility. The system also provides role-based access control, ensuring admins, users, and guests have clear permissions. Overall, this project makes content creation, publishing, and management more structured and accessible without requiring advanced technical skills.