



Project Presentation of Full Stack(FSE)

On

BLOG WEBSITE

Krishna
2210991809

Lakshmesh
2210991844

Kunwardeep
2210991829

Kushal
2210991834

Kavya
2210991778

Supervised By
<Rahul>

Department of Computer Science and Engineering,
Chitkara University, Punjab

- Problem Statement
- Objective
- Key Features
- Pros & Cons
- Future Scope
- References

In today's digital landscape, users seek a personalized and seamless blogging experience with modern features. Existing platforms often lack flexibility, intuitive UI, and real-time interactivity. The challenge is to build a MERN Stack Blog Application with User Authentication (JWT-based), Dark Mode, Post Uploading, and Search Functionality to enhance user engagement. The application should allow users to securely register/login, create and manage blog posts with images, search for posts efficiently, and toggle dark mode for better accessibility, ensuring a responsive and scalable solution..

Objective

User Authentication & Security: Implement JWT-based authentication for secure user login and registration, ensuring only authorized users can create, edit, or delete blog posts.

Create, Manage & Upload Blog Posts: Allow users to write, edit, delete, and upload blog posts with rich-text formatting and image uploads, enhancing content presentation.

Search & Filter Functionality: Enable users to search and filter blog posts based on keywords, categories, or tags, ensuring quick and efficient content discovery.

Dark Mode for Better Accessibility: Provide a dark mode toggle to enhance user experience, reduce eye strain, and improve accessibility for readers.

This project offers valuable learning experiences in several areas:

User Authentication & Security (JWT-based)

Users can securely register, log in, and log out using JSON Web Token (JWT)-based authentication.

Ensures secure API access, preventing unauthorized actions like blog editing or deletion.

Uses password hashing (bcrypt.js) to enhance security and protect user credentials.

Create, Manage & Upload Blog Posts

Users can write, edit, and delete blog posts with a rich-text editor for better formatting.

Supports image uploads to make blogs visually appealing using Multer (Node.js middleware).

Provides an intuitive dashboard for managing personal blog posts efficiently.

Search & Filter Functionality

Implements a real-time search bar to allow users to quickly find blogs based on titles, keywords, or tags.

Enables category-based filtering, helping users discover relevant content easily. Uses MongoDB indexing to optimize search queries and improve performance. Dark Mode for Better Accessibility

Offers a dark mode toggle to improve readability and reduce eye strain, enhancing the user experience. Stores user preferences using local storage, ensuring the selected mode persists across sessions.

Provides a modern UI with smooth theme transitions using CSS or Tailwind CSS. Responsive & Scalable UI

Developed using React.js to create a fast, interactive, and responsive user interface.

Optimized for mobile and desktop devices, ensuring seamless navigation across different screen sizes. Uses Redux (optional) for state management, ensuring smooth data flow and user interactions.

Pros

- Single-Language Stack: JavaScript for both frontend and backend simplifies development.
- Scalable &
- Fast: MongoDB's NoSQL structure supports flexibility and growth.
- Interactive UI: React ensures a smooth and dynamic user experience.
- Secure Authentication: JWT-based login protects user data. Highly Customizable: Easy to add features like comments, likes, and roles

Cons

- Complex Setup: Requires configuring multiple technologies.
- SEO Limitations: SPAs struggle with indexing without SSR or Next.js.
- Deployment Challenges: Managing frontend and backend hosting is tricky.
- Database Overhead: NoSQL makes complex queries harder.
- Performance Issues: Needs optimization for handling high traffic.

Future Scope

AI-Powered Content Recommendations – Implement AI/ML algorithms to suggest relevant blogs based on user preferences.

Monetization Features – Integrate ad placements, subscription models, and affiliate marketing for revenue generation.

Voice-to-Text Blogging – Enable voice input for blog creation to enhance accessibility and ease of use.

Multi-Author Collaboration – Allow multiple users to co-author and edit blog posts in real time.

PWA & Offline Mode – Develop a Progressive Web App (PWA) for better mobile accessibility and offline reading.



Title

Normal **B** *I* U

Publish

Status: Draft

Visibility: Public

[Upload Image](#)

Save as Draft

Publish

Category

- ☐ Art
- ☐ Science
- ☐ Technology
- ☐ Cinema
- ☐ Design
- ☐ Food
- ☐ Other



A poetic Or reflective piece

There is a quiet kind of magic in a girl — not the loud, showy kind that bursts into the room demanding attention, but the gentle, steady type that reshapes the world from the inside out. She begins as a whisper — a cradle song hummed into the univers...

[Read More](#)

The World of Anime: More Than Just Cartoons

When people hear the word anime, they might think of vibrant characters, over-the-top action scenes, or emotional rollercoasters. While all of that is true, anime is much more than a form of entertainment—it's a global cultural movement, a unique art...

[Read More](#)



sumn

Posted a month ago

A poetic Or reflective piece

There is a quiet kind of magic in a girl — not the loud, showy kind that bursts into the room demanding attention, but the gentle, steady type that reshapes the world from the inside out. She begins as a whisper — a cradle song hummed into the universe, wrapped in soft blankets and hope. In her eyes, the stars flicker with innocence, and the sky seems just a little closer when she reaches for it with chubby fingers. She learns to crawl, then to walk, then to run — not just across the floor, but through questions, books, stories, and dreams. Her world is full of “what ifs” and “why nots,” and she dares to believe them all. The girl dances before she knows rhythm. She sings before she knows melody. She believes in love before she understands loss. And that belief — wild, untouched by cynicism — is the rarest form of bravery. She speaks to trees, names her shadows, and counts the stars with solemn reverence, as if they hold answers just out of reach. But time moves, as it always does. Soon, she meets the mirror. And the mirror speaks. It doesn’t always tell the truth. Sometimes it whispers cruel things in polished glass — things about not being enough, not being right, not fitting into the world the way she thought she would. The girl starts to shrink herself, folding corners of her personality like paper cranes, hoping smaller will mean safer. There are lessons in the silence — the silence of not being chosen, of being misunderstood, of sitting at the edge of loud laughter that doesn’t reach her. And yet, within that silence, something stirs. A seed. A spark. A sentence half-formed in the back of her mind: Maybe I don’t need to be like

Other posts you may like



A poetic Or reflective piece

[Read More](#)

The Evolution of Cars: From the Horse-drawn Carriages to Autonomous Vehicles

[Read More](#)

Understanding Media & Content



My Blog



A poetic Or reflective piece

There is a quiet kind of magic in a girl — not the loud, showy kind that bursts into the room dem...

[Read More](#)

The Evolution of Cars: From the Horse-drawn Carriages to Autonomous Vehicles

The automobile industry has come a long way since its humble beginnings. From the first horseless...

[Read More](#)

Beyond the Stars: Humanity's Journey into Space

Space has always fascinated humankind. It is a vast, mysterious, and beautiful expanse that stret...

[Read More](#)



sumn

Posted a month ago



A poetic Or reflective piece

There is a quiet kind of magic in a girl — not the loud, showy kind that bursts into the room demanding attention, but the gentle, steady type that reshapes the world from the inside out. She begins as a whisper — a cradle song hummed into the universe, wrapped in soft blankets and hope. In her eyes, the stars flicker with innocence, and the sky seems just a little closer when she reaches for it with chubby fingers. She learns to crawl, then to walk, then to run — not just across the floor, but through questions, books, stories, and dreams. Her world is full of “what ifs” and “why nots,” and she dares to believe them all. The girl dances before she knows rhythm. She sings before she knows melody. She believes in love before she understands loss. And that belief — wild, untouched by cynicism — is the rarest form of bravery. She speaks to trees, names her shadows, and counts the stars with solemn reverence, as if they hold answers just out of reach. But time moves, as it always does. Soon, she meets the mirror. And the mirror speaks. It doesn’t always tell the truth. Sometimes it whispers cruel things in polished glass — things about not being enough, not being right, not fitting into the world the way she thought she would. The girl starts to shrink herself, folding corners of her personality like paper cranes, hoping smaller will mean safer. There are lessons in the silence — the silence of not being chosen, of being misunderstood, of sitting at the edge of loud laughter that doesn’t reach her. And yet, within that silence, something stirs. A seed. A spark. A sentence half-formed in the back of her mind: Maybe I don’t need to be like

Other posts you may like



A poetic Or reflective piece

[Read More](#)

The Evolution of Cars: From the Horse-drawn Carriages to Autonomous Vehicles

[Read More](#)

Understanding Nudity: A Complex



A poetic Or reflective piece

Normal **B** *I* U

There is a quiet kind of magic in a girl — not the loud, showy kind that bursts into the room demanding attention, but the gentle, steady type that reshapes the world from the inside out. She begins as a whisper — a cradle song hummed into the universe, wrapped in soft blankets and hope. In her eyes, the stars flicker with innocence, and the sky seems just a little closer when she reaches for it with chubby fingers. She learns to crawl, then to walk, then to run — not just across the floor, but through questions, books, stories, and dreams. Her world is full of “what ifs” and “why nots,” and she dares to believe them all.

The girl dances before she knows rhythm. She sings before she knows melody. She believes in love before she understands loss. And that belief — wild, untouched by cynicism — is the rarest form of bravery. She speaks to trees, names her shadows, and counts the stars with solemn reverence, as if they hold answers just out of reach.

But time moves, as it always does.

Soon, she meets the mirror. And the mirror speaks. It doesn't always tell the truth. Sometimes it whispers cruel things in polished glass — things about not being enough, not being right, not fitting into the world the way she thought she would. The girl starts to shrink herself, folding corners of her personality like paper cranes, hoping smaller will mean safer.

There are lessons in the silence — the silence of not being chosen, of being misunderstood, of sitting at the edge of loud laughter that doesn't reach her. And yet, within that silence, something stirs. A seed. A spark. A sentence half-formed in the back of her mind: *Maybe I don't need to be like them to be loved.*

She begins to write. Not always with pen and paper — sometimes with glances, with choices, with refusals. Every “no” becomes a brushstroke in the mural of her boundaries. Every “yes” becomes a doorway she dares to walk through. She discovers that her voice is a bridge — fragile at first, then stronger, built one truth at a time.

She grows.

She stumbles, of course. There are heartbreaks that teach her how deeply she can feel. There are friendships that fracture like glass — sharp, sudden, and painful to hold onto. But each break reveals something beneath: resilience, raw and real.

Publish

Status: Draft

Visibility: Public

[Upload Image](#)[Save as Draft](#)[Update](#)

Category

- ☐ Art
- ☐ Science
- ☐ Technology
- ☐ Cinema
- ☐ Design
- ☐ Food
- ☒ Other

- **MERN Stack Blog Project (GitHub - thatanjan):** <https://github.com/thatanjan/dev.to-clone>
- **MERN Blog App (GitHub - avinash201199):** <https://github.com/avinash201199/MERN-Blog-Project>
- **MERN Blog Platform (GitHub - YashKumarVerma):** <https://github.com/YashKumarVerma/Bloggie>
- **Blog Application with MERN Stack (GitHub - smitra107):** <https://github.com/smitra107/MERN-Blog-Application>
- **DevBlog - MERN Blog Website (GitHub - nibeditadey):** <https://github.com/nibeditadey/devblog>
- **Simple Blog using MERN (GitHub - robdy.io):** <https://github.com/robdy/mern-blog-app>
- **Medium Clone with MERN (GitHub - manish-virgat):** <https://github.com/manish-virgat/MERN-medium-clone>
- **MERN Blog CMS (GitHub - mohsinulhaq):** <https://github.com/mohsinulhaq/mern-blog-cms>