

WT Jackfruit Project Doc

Project Title: User-Generated Blogging Platform.

Problem Statement: Content creators and readers struggle to discover and share niche articles due to limited platforms that support easy publishing, categorisation, and community engagement without technical barriers. This project builds a full-featured blogging site where users can author posts, organise them into categories, interact via comments, and search content, fostering a vibrant community while simplifying content management for non-technical users.

Tech Stack: The MERN stack forms the backbone for this content-driven application, enabling seamless data handling and interactive features.

- Frontend: React.js for dynamic post views, editor interfaces, and comment sections with real-time previews.
- Backend: Node.js and Express.js for processing API requests for post creation, user sessions, and content moderation.
- Database: MongoDB to store blog posts, user profiles, comments, and tags using nested schemas for efficient retrieval.
- Optional tools: React-Quill for Markdown/rich text editing and bcrypt for password hashing.

Required Skills: This project enhances web development expertise, complementing React and component-building background.

- JavaScript (ES6+) proficiency for managing async content loading and editor state synchronisation.
- React skills, including hooks (useState, useEffect), routing with React Router for post navigation, and integrating UI libraries for text editing.
- Node.js and Express.js for designing RESTful APIs, implementing authentication middleware, and handling file uploads for images.
- MongoDB via Mongoose for schema creation (e.g., Post and User models), population queries for comments, and indexing for search functionality.
- Content validation, SEO basics for post metadata, responsive styling with CSS modules, and deployment to platforms like Vercel or DigitalOcean.