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DATE : 12-09-2025

Completed the project named as Phase_01_ TECHNOLOGY

PROJECT NAME : Blog Site with Comment Section

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Phase 1-Problem Understandings & Requirements

Problem Statement

In the modern digital world, blogs serve as an effective medium for individuals and organizations to share knowledge, opinions, and experiences with a wide audience. However, many existing blogging platforms are either too complex for beginners, include unnecessary advanced features, or require external hosting and subscriptions that make them less accessible. As a result, users seeking a simple and efficient blogging solution often face difficulties in creating and managing their content with ease.

Another common limitation is the absence or restriction of interactive features such as a comment section. Without the ability to comment, blogs become a one-way communication channel where readers can only consume information without expressing their views or engaging in discussions. This lack of interaction reduces user engagement and community building. Therefore, there is a need for a simple, user-friendly blog site with an integrated comment section that enables both effective content publishing and meaningful interaction between authors and readers.

Users & Stakeholders

Users

- **BlogAuthors –** Individuals who create, edit, and publish blog posts. They are the primary content creators of the platform.

- **Readers/Visitors –** People who browse through the blog posts, read content, and engage through the comment section.

- **Commenters –** Readers who actively contribute by leaving feedback, opinions, or questions in the comment section.

Stakeholders

- **Developers/Project Team –** Responsible for designing, developing, and maintaining the blog site.

- **Administrators –** Manage the platform, moderate content, and oversee user activities such as handling spam or inappropriate comments.

- **Educational Institutions/Organizations (if applicable) –** Can use the platform as a case study, training tool, or official blogging site.

- **Future Users/Community –** Potential groups or individuals who may adopt the blog site for personal or professional purposes, contributing to its growth and sustainability.

User Stories

For Blog Authors

- As a blog author, I want to create and publish blog posts so that I can share my knowledge and ideas with readers.
- As a blog author, I want to edit or delete my posts so that I can keep my content accurate and updated.
- As a blog author, I want to view comments on my posts so that I can understand readers' opinions and feedback.

For Readers/Visitors

- As a reader, I want to browse and read blog posts so that I can gain information or entertainment.
- As a reader, I want to leave comments on blog posts so that I can share my thoughts and interact with the author.
- As a reader, I want to see other readers' comments so that I can take part in discussions.

For Administrators

- As an administrator, I want to manage user accounts so that only valid users can access the system.
- As an administrator, I want to moderate comments so that spam or offensive content is removed.
- As an administrator, I want to manage blog posts so that the platform maintains quality and relevance.

MVP Features

1.User Authentication & Access Control
- Asimple registration and login systemfor both authors and readers.
- Users can securely log in and log out.
- Only authenticated users (authors) can create or edit blog posts, while readers can comment after login.

2.Blog Post Management
- Authors can create, edit, and delete their own blog posts.
- Blog posts display essential details such as title, author name, and date of posting.
- Content is stored in a structured way in the database for easy retrieval.

3.Comment Section
- Eachblog post has an associated comment section where readers can add feedback.
- Comments appear in chronological order to maintain readability.
- Authors can view and respond to comments on their posts.

4.Content Viewing & Navigation
- Visitors(includingnon-registered users) can browse and read published blog posts.
- Posts are displayed in a clean and user-friendly interface.
- A basic navigation system allows readers to move between posts easily.

Wireframes/API Endpoint list

Wireframes

1.Home Page (Blog Listing)

- The home page displays a list of all published blog posts. Each post shows the title, author name, date of publishing, and a short description/excerpt. At the top, there is a navigation bar with the blog site logo on the left and options like Login/Register on the right. Each post has a "Read More" link to open the full blog.

2.Blog Post Page (with Comments)

- When a reader clicks on a blog post, they are taken to the post detail page. This page displays the full blog title, author, date, and complete content. Below the content, there is a comments section where all comments related to that post are displayed in chronological order. At the bottom, logged-in users can add their comments through a text box and a Submit button.

3.Login / Register Page

- This pageallowsusers to log in or create a new account. It contains username and password fields with buttons for Login and Register. Successful login gives access to features like commenting or posting (if the user is an author).

4.Admin Dashboard (Optional for MVP)

- Theadmin dashboardis designedfor platform administrators. It provides features such as managing users (approve, block, or delete) and moderating posts/comments. This ensures quality content and prevents spam or inappropriate activity.

API Endpoint List

1.Authentication
- POST /api/register → Register a new user
- POST /api/login → Authenticate user and return token/session
- POST /api/logout → Logout the current user

2.Blog Posts
- GET /api/posts → Get all blog posts
- GET /api/posts/{id} → Get a single blog post by ID
- POST /api/posts → Create a new blog post (author only)
- PUT /api/posts/{id} → Edit an existing blog post (author only)
- DELETE /api/posts/{id} → Delete a blog post (author/admin only)

3.Comments
- GET /api/posts/{id}/comments → Get comments for a specific post
- POST /api/posts/{id}/comments → Add a new comment to a post
- DELETE /api/comments/{id} → Delete a comment (author/admin only)

Acceptance Criteria

1.User Authentication
- Users should be able to register with a unique username and password.
- Users should be able to log in and log out securely.
- Only logged-in users should be able to post blogs or comments.

2.Blog Post Management
- Authorsshouldbe ableto create, edit, and delete their own blog posts.
- Blog posts should display the title, author name, and date of publishing.
- Blog posts should be visible to all visitors, even without login.

3.Comment Section
- Eachblog postshould allow readers to add comments after login.
- Comments should be displayed in chronological order under the corresponding blog post.
- Authors or admins should be able to remove inappropriate comments.

4.Content Viewing & Navigation
- Visitors shouldbe ableto view a list of blog posts on the homepage.
- Clicking on a post should open the full content along with comments.
- Navigation should be simple and user-friendly.