

JAYPEE INSTITUTE OF INFORMATION TECHNOLOGY
SECTOR 128, NOIDA



TITLE:- BLOGGING WEBSITE

Course Name:- DATABASE SYSTEMS AND WEB LAB

Course Code:- 15B17CI372

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INTRODUCTION

The Blogging Website project is designed to provide users with a platform to create, publish, and manage their own blog posts. The system will allow users to register, log in, and write blog articles that can be shared with others. Visitors will be able to browse, read, and comment on published blogs. The project will feature user authentication, blog categorization, tagging, and a commenting system.

The primary objective of the project is to develop a fully functional and user-friendly blogging platform, utilising web development technologies such as HTML, CSS, JavaScript for the frontend, and PHP for server-side scripting. A MySQL database will be used to store user data, blog posts, and comments securely. The project will also focus on responsive design, making the website accessible on multiple devices.

This website will be evaluated based on creativity, functionality, and the use of technologies like PL/SQL for database management. The report will include documentation of system requirements, database design, and an analysis of the implemented features and functionalities.

The key objectives of the project include:

- Providing a platform for users to write, publish, and manage blog posts.
- Ensuring secure user registration and login features.
- Implementing a commenting system for user interaction.
- Designing a responsive and intuitive user interface.
- Storing and managing data effectively using MySQL.

OBJECTIVES

User Authentication: Ensure that users can securely log in and manage their accounts.

Blog Creation and Management: Allow users to write, edit, and publish blog posts, with CRUD operations to manage content.

Real-time Communication: Enable features like real-time commenting or live updates.

File Storage: Provide the capability to upload and manage images or files related to blog posts.

Data Persistence: Use MySQL for storing user information, blog content, and related data efficiently.

Responsive Design: Create a user-friendly, mobile-responsive website using HTML, CSS, and JavaScript.

• Background and Context

Blogging has become a powerful tool for individuals and organisations to share information, ideas, and opinions with a global audience. As online content consumption grows, there is a demand for well-structured, user-friendly blogging platforms that cater to diverse content creators and readers. A blogging website facilitates personal expression, professional insights, and community building by providing a space where content can be created, managed, and consumed with ease.

• Problem Statement

Many existing blogging platforms are either too complex for beginners or too limited in functionality for advanced users. Users often face challenges such as difficult navigation, poor content management tools, or insufficient personalization options. This project aims to address these issues by developing a simple yet robust blogging website that offers both ease of use for new bloggers and advanced features for experienced users.

• Project objective

1. User Registration and Login:

- Users should be able to create an account by providing their personal information (name, email, password).
- Registered users must log in using their email and password to access their dashboard.
- Password encryption will be applied for security purposes.

2. Dashboard for Users:

- Logged-in users should have access to a dashboard where they can view, create, edit, and delete their blog posts.
- Users should be able to see a list of all their published blogs and drafts.

3. Blog Creation, Editing, and Deletion:

- Users can create new blog posts with a title, content, and tags.
- Users should be able to edit their blog posts after publishing.
- Option to delete their own blogs should be available.

4. Blog Post Categorization:

- Blog posts can be assigned to categories for better organization and navigation.

5. Commenting System:

- Users (both registered and guests) can leave comments on blog posts.
- The author of the blog post can manage and delete comments if necessary.

6. Tagging System:

- Users can add tags to their blogs for better searchability.
- Tags will help categorise and filter blog posts based on topics.

7. Responsive Design:

- The website must be accessible and display properly on various devices (desktops, tablets, and mobile phones).

8. Search and Filter Functionality:

- Visitors and users should be able to search blogs by keywords, tags, or categories.

9. Visitor Access:

- Non-registered users can browse blog posts and leave comments but will not be able to create or manage blogs.

• **Scope of the project**

User Registration and Authentication

- The website will support user account creation, secure login/logout, and profile management. It will ensure user data is protected through encryption.

Blog Post Management

- Users will have the ability to create, edit, delete, and publish blog posts. Blog content will be organized through categories, tags, and metadata to improve navigation.

Commenting and Interaction

- The platform will offer a commenting system that allows readers to engage with blog content in real-time. Users will be notified of new comments and replies.

File Uploads and Multimedia Support

- The system will allow users to upload images, videos, and other media files to enhance their blog posts. File management will be implemented to support efficient storage and retrieval.

Search and Filtering

- A search function will be included for users to find blog posts based on keywords, tags, and categories, improving content discoverability.

Responsive Design

- The website will be designed to work smoothly on both desktop and mobile devices, ensuring accessibility and ease of use across various platforms.

Admin Panel and Moderation

- An administrative dashboard will be developed for managing users, blog content, and comments, allowing for easy moderation and content approval.

Database Management

- MySQL will be used for storing user data, blog posts, comments, and multimedia. The database will be optimized for data persistence and quick access.

Future Expansion

- The project will be designed to allow for future enhancements such as social media integration, analytics tools, and monetization options (e.g., ads or premium content).

Security and Privacy

- SSL encryption and secure coding practices will be used to protect user information and communication between the server and the client.

SYSTEM REQUIREMENTS

● Client-Side (User) Requirements:

1. Browser Compatibility:

- Latest versions of modern browsers (Google Chrome, Mozilla Firefox, Microsoft Edge, Safari).
- JavaScript enabled for interactive features.
- Cookies enabled for user sessions and authentication.

2. Device Requirements:

- Desktop or laptop with a minimum resolution of 1024x768 pixels.
- Mobile devices with iOS or Android operating systems for responsive design compatibility.

3. Internet Connection:

- Stable internet connection with a minimum speed of 1 Mbps for smooth browsing and multimedia loading.

4. Operating System:

- Compatible with Windows, macOS, Linux for desktops, and iOS/Android for mobile devices.

● Server-Side Requirements:

1. Web Server:

- Apache or Nginx server to host the website.

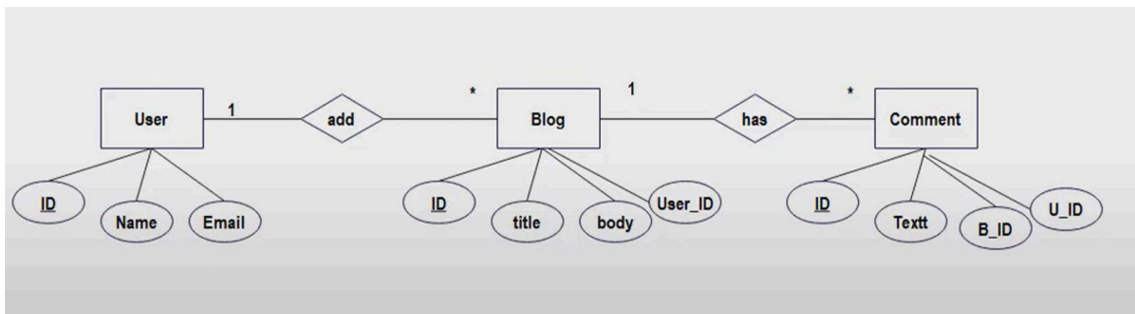
2. Backend Requirements:

- PHP 7.4 or above for server-side scripting.
- MySQL 5.7 or above for database management.

3. **Storage:**

- Sufficient disk space to store blog data, images, and multimedia files (depending on the number of users and expected content volume).

ER DIAGRAM



Conclusion

The blogging website project aims to develop a user-friendly and dynamic platform for content creators to share their thoughts, ideas, and media with an audience. The website will allow users to register, create and manage blog posts, and engage with others through comments. Key features include user authentication, real-time commenting, multimedia support, and content categorization. The platform will be built using PHP for server-side scripting and MySQL for database management, with a focus on responsive design to ensure compatibility across devices. Additionally, it will incorporate an admin panel for content moderation and management. The goal is to create a functional, secure, and scalable platform that can be expanded with features like user analytics and monetization in the future.