Tribhuvan University

Faculty of Humanities and Social Sciences

Online Blogging System

A PROJECT REPORT

Submitted To:

Department of Computer Application

Ratna Rajyalaxmi Campus

In partial fulfillment of the requirement for the Bachelor in Computer Application

Submitted By:

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SUPERVISOR'S RECOMMENDATION

I hereby recommend that this project prepared under my supervision by BISHAM RAJ PANDEY and BISHAL REGMI entitled "Online Blogging System" in partial fulfillment of the requirements for the degree of Bachelor of Computer Application is recommended for the final evaluation.

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Bipin Timilsina

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LETTER OF APPROVAL

This is to certify that the project prepared by BISHAM RAJ PANDEY and BISHAL REGMI entitled "Online Blogging System", In partial fulfillment of the requirements for the degree of Bachelor in Computer Application has been evaluated in our opinion it id satisfactory in the scope and quality as a project for the required degree.

SIGNATURE of Supervisor	**SIGNATURE of HOD/Coordinator**
------------------------------------ Bipin Timilsina Lecturer, Project Supervisor Ranta Rajyalaxmi Campus	--- Mr. Bhupendra Ram Luhar Coordinator Department of BCA Ratna Rajyalaxmi Campus
SIGNATURE of Internal Examiner	**SIGNATURE of External Examiner**
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ABSTRACT

The purpose of the "Online Blogging System" is to make it easy for users to create and manage their blogs using computers and user-friendly software. This system aims to securely store important data for an extended duration, with easy access and editing capabilities. The required software and hardware are readily available and simple to use.

The Online Blogging System described above aims to provide a reliable and efficient way to manage blogs. It helps users focus on their other tasks instead of spending time on manual record-keeping. With this system, people can maintain digital records without duplicating entries.

The objective is to enhance the current system by implementing computer equipment and user-friendly software. This enhancement will streamline the storage and management of valuable information, providing users with convenient access and editing capabilities.

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CHAPTER 1: INTRODUCTION

1.1. Background

The aim of the project is to create an "Online Blogging System" that offers a platform for users to share news and information. This system allows readers to access blogs from wide range of topics including Entertainment, National and International events, Sports, Politics, Education, and more. The content on this site can be posted by anyone and will be strictly moderated by the Moderators.

The Online Blogging System is designed to address the limitations of other methods by providing a user-friendly web-based platform. Users do not need any specialized knowledge to use the system, making it accessible to a global audience. It serves as a valuable source of information for those seeking to gain information on specific topics as well as wanting to record their thoughts and ideas and share them with the world.

Our Online Blogging System isn't just about sharing news, but it's about building connections between people. By providing a platform where users can engage with each other through comments and discussions, we aim to create a sense of community and belonging. Whether it's sharing personal experiences, exchanging ideas, or voicing opinions, our system encourages meaningful interactions that are not bound by geographical boundaries. In an increasingly digital world, where face-to-face communication is limited, our platform serves as a virtual gathering place where individuals can come together, learn from each other, and collectively talk about of our shared experiences. Through this collaborative exchange, we aim to bridge divides, cultivate empathy, and create a sense of community on the system.

In today's world, technology is everywhere, shaping how we live and interact. Our project is all about using technology to bring people together and make information easier to find. We want to help people stay informed and engaged with the world around them. With our system, powered by PHP and MySQL in the background and HTML, CSS, and JavaScript in the front, we're making it easier for everyone to share and access news online.

1.2. Problem Statement

The emergence of online blogging systems is prompted by several pressing issues in traditional media. As traditional media outlets decline in popularity, there is a growing need for accessible and convenient platforms where individuals can easily access reliable information. However, the prevalence of fake news and misinformation on the internet poses a significant challenge to the credibility and trustworthiness of online content. Addressing these concerns requires the development of online blogging systems that prioritize accuracy, transparency, and user engagement to counteract the negative impacts of fake news and misinformation while providing convenient access to reliable information for users. The main Problems of traditional blogging systems are

- Decline of Traditional Media
- Accessibility and Convenience
- Prevalence of Fake News and Misinformation

1.3. Objectives

The objectives of our online blogging system are threefold. Firstly, we aim to provide a user-friendly platform where individuals can easily create and publish content, including blog posts, images, and videos. Secondly, our goal is to foster a sense of community by encouraging interaction and engagement among users through features like comments sections and sharing functionalities. Lastly, we seek to promote information sharing and discovery by organizing content into categories, implementing search options, and recommending related posts based on users' interests. By achieving these objectives, we aim to create a dynamic and inclusive online space where users can connect, collaborate, and share knowledge and experiences.

- Providing a Platform for Content Creation
- Fostering Community Engagement
- Promoting Information Sharing and Discovery

1.4. Scope and Limitation

<u>Scope:</u>

The scope of our online blogging system encompasses facilitating content creation, community building, and information sharing among users. Through our platform, individuals can easily generate diverse content, including articles, multimedia presentations, and stories, fostering creativity and expression. Additionally, our system serves as a catalyst for community building, providing features like comments, likes, and shares that encourage interaction and collaboration among users with shared interests. Moreover, our platform acts as a central hub for sharing valuable information and knowledge on various topics, facilitating the exchange of insights, experiences, and opinions among users. By offering these functionalities, we aim to create a dynamic and inclusive online space that promotes engagement, learning, and connection among our user community.

- Content Creation
- Community Building
- Information Sharing

<u>Limitation:</u>

One limitation of online blogging systems is the challenge of reaching a wide audience and generating revenue. While these platforms offer opportunities for bloggers to share their content with a global audience, attracting and retaining readers can be difficult due to competition and content saturation. Additionally, the monetization options available to bloggers may be limited, with revenue primarily coming from sources such as advertising and affiliate marketing. This reliance on external sources of income can pose challenges for bloggers looking to generate sustainable revenue streams. Furthermore, accessibility barriers such as language, internet connectivity, and device compatibility may further limit the reach and impact of bloggers, particularly in underserved regions where access to technology is limited.

- Accessibility and Reach
- Limited Monetization Options

1.5 Report Organization

The report can be organized into 5 chapters which are given below:

Chapter 1: Includes introduction includes the brief introduction of the system, statement of problem, objectives, scope and limitation.

Chapter 2: Includes background study and literature review includes the previous work related to the systems and similar works were studied and are summarized.

Chapter 3: Includes system analysis and design includes different feasibility analysis and designed system architecture, system flow diagram, dataflow diagram.

Chapter 4: Includes implementation and testing includes various implementation method and tools and also contains description of testing.

Chapter 5: Includes conclusion and future recommendations includes outcomes of the system, conclusion to the system and description about what features can be added in the future.

CHAPTER 2: BACKGROUND STUDY AND LITERATURE REVIEW

2.1. Background Study

Blogs, short for weblogs, are online platforms where individuals or groups can share their thoughts, opinions, and experiences in a chronological format. Dating back to the late 1990s, early blogging sites such as LiveJournal, Blogger, and WordPress paved the way for the popularity of blogging as a form of personal expression and information dissemination. These platforms offered users the ability to publish content easily and interact with readers through comments and sharing features. Over time, blogging has evolved into a diverse and dynamic medium, with blogs covering a wide range of topics including lifestyle, fashion, technology, travel, and more. Today, blogging remains a popular means of communication and storytelling, with modern platforms offering advanced features and customization options to cater to the needs and preferences of bloggers and readers alike.

2.2. Literature Review

Blogging systems have undergone significant evolution since their inception in the late 1990s, transforming the landscape of online communication and content creation. Early platforms like LiveJournal, Blogger, and WordPress paved the way for the popularity of blogging as a mainstream medium for sharing thoughts, opinions, and experiences [1]. These platforms democratized content creation by offering simple yet effective tools for publishing and managing blogs.

User engagement and community building emerged as critical aspects of blogging platforms' success, with features like comments sections and social sharing buttons facilitating interaction and collaboration among users [2]. Additionally, the integration of social media functionalities into blogging platforms has further enhanced user engagement and content dissemination [3]

Monetization strategies have become increasingly important for bloggers seeking to generate revenue from their content. While advertising and affiliate marketing remain popular options, issues such as ad blockers and declining ad rates pose challenges to monetization efforts [4] .Moreover, accessibility barriers such as language and device compatibility may limit the reach and impact of bloggers, particularly in underserved regions .

Overall, blogging systems continue to evolve in response to changing user needs, technological advancements, and cultural shifts. By understanding the key themes and trends in the development and usage of blogging systems, researchers and practitioners can better address the challenges and opportunities facing this dynamic medium.

CHAPTER 3: SYSTEM ANALYSIS AND DESIGN

3.1. System Analysis

System analysis involves collecting and understanding information about the Online Blogging System to identify problems and suggest improvements. It's a problem-solving process that requires communication between users and developers. The analyst closely examines the current system, identifying issues and proposing solutions. These proposals are compared with the existing system, and the best one is chosen after user approval. Preliminary study gathers facts and conducts feasibility studies to guide further analysis and decision-making.

3.1.1. Requirement Analysis

1. Requirement analysis is a softer engineering task that bridges the gap between the system level software allocation and software design.
2. It provides the software designer with are presentation of information and function that can be translated to data, architectural and procedural design.
3. It enables the system engineering to specify function and performance indicate software interface with other system elements.

I. Functional Requirement

Function requirements define the fundamental actions that system must perform. The functional requirements for the system are divided into two categories, moderators and users as well as further details, referred to as use cases. The Use case Diagram of the system is given below:
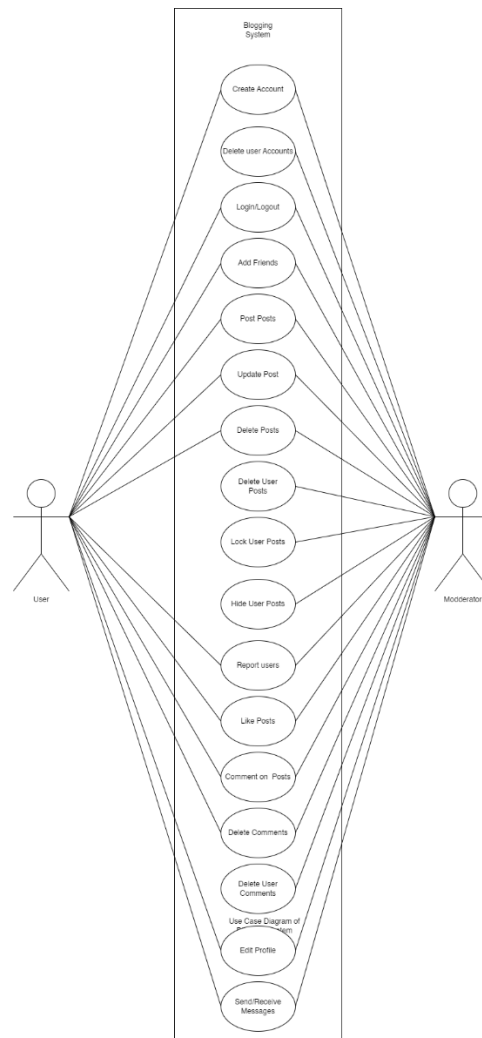

Figure 1: Use Case Diagram of online portal System.

II. Non-Functional Requirements

a. Portability: Our system platform independent system so it can run in any browser.

b. Security: There is a high security in keeping the information of user and transaction of money.

c. Backup: Incase of system failure there is database which will store all the information about all the client.

d. User friendly: Our system is user friendly, it can be easily use and understand by user.

3.1.2. Feasibility Analysis

A feasibility study aims to objectively and rationally uncover the strengths and weaknesses of an existing business or proposed venture, opportunities and threats present in the natural environment, the resources required to carry through, and ultimately the prospects for success.

Technical

Since the project is design with PHP as code behind and MySQL as backend it is easy to install in the systems whenever needed. It is more efficient, easy and user friendly to understand by almost everyone. Huge amount of data can be handled efficiently using MySQL as backend. Hence this project has good technical feasibility.

Operational

Operational feasibility pertains to the effectiveness with which the system addresses issues and capitalizes on opportunities as outlined during the system's scope definition. The project is deemed to be feasible to operate.

- The current mode of operation provides good throughput and response time.
- The organization will gain significant benefits from the proposed system.
- The resources available are used to the maximum capacity to deliver quality system on time.

Economic

This seeks to assess the positive economic advantages that the proposed system will offer to the organization.

- The system is cost effective
- The efficient management of rehouses will diminish the cost of this system
- The benefits of this system will outweigh the costs.

3.1.3. Data Modeling (ER-Diagram)

3.1.4. Process Modeling (DFD)

3.2. System Design

System design is the most creative and challenging. The System Design Document describe the system requirements, Operating, system and subsystem architecture, files and database design, input formats, output layouts, human-machine interface, detailed design, processing logic, and external interface.

3.2.1. Architectural Design

3.2.2. Database Schema Design

3.2.3. Interface Design

3.2.4. Physical DFD

CHAPTER 4: Implementation and Testing

4.1. Implementation

The implementation phase involves the application of design specifications done before. The implementation involves coding of the system designs if this project, systems testing are live running. During implementation we start coding according to our requirement.

4.1.1. Tools Used

This project is developed using the tools, which are most suited for development of the PSTU web-based system. These tools are as follows:

- ➢ HTML (For the Front end)
- ➢ CSS (Cascading Style for all page)
- ➢ JAVASCRIPT
- ➢ PHP (For Back end Programming)
- ➢ MYSQL (For database Storage as Backend)

4.1.2. Implementation Details of Modules (Description of Procedures/Function)

There are various modules present in this system. They are

Login Module

The Login module facilitates the login process for registered users. The user provides their username and password which will lead them to the system.

Register Module

The Register module facilitates the registration process for new users. The user provides information such as username, email, profile picture etc.

Post Module

This module allows the user to post posts. The user provides information such as title, text image which is then stored and displayed to other users.

Display Module

This module allows the user to see the post other users have posted. This allows users to read other people's blogs

Account Module

This module allows the user to see their own account. This allows the user to change their username, password, profile picture etc.

4.2. Testing

The testing section is accomplished to validate the News portal System. The News Portal System is examined to test if the final system can work in keeping with what we have been waiting for and is free from any programming and logical errors. It additionally makes sure whether or not all of the system and requirements are met or not.

4.2.1. Test Cases for Unit Testing

Unit testing is a software program development method in which the smallest testable components of an application, know as units, are individually and independently scrutinized for correct operation. Below are the numerous tables for distinctive test case.

Table 1: Test case 1 Register

S.N	Test Case	Input	Expected Outcome	outcome
1	Navigate to Register page	Path: http://localhost/codes/4th%20sem/unit-2-php/test/test-register.php	Register page should open	As expected i.e. Member is navigated to register in page of system
2	Provide own details	Email, username, password, profile picture, bio	Credential should be entered	As expected
3	Click register Button	Button clicked	User should be registerd	As Expected

Table 2: Test case for login

S.N	Test Case	Input	Expected Outcome	outcome
1	Navigate to Login page	Path: http://localhost/codes/4th%20sem/unit-2-php/test/test-login.php	Login page should open	As expected i.e. Member is navigated to login page of system
2	Provide details	Email and password	Credential should be entered	As expected
3	Click login Button	Button Clicked	User should log in	User is logged in
4	Provide wrong email	Wrong email and password	Credential should be entered	As expected
5	Navigate to register page	Link to go to register page is clicked	Register page should open	As expected i.e. Member is navigated to register page of system

4.2.1. Test Cases for system Testing

System Testing is a from of software testing that is executed on a complete integrated system to assess the compliance of the system with the corresponding requirements.

Table 3: Test case 4 system Test

Sn	Test Case	**Test Data**	**Expected Outcome**	**outcome**
1	Check Register	Username, password, email Profile picture, bio	User register	As expected
2	Check Login	Email, password	User login	As expected
3	Check display		Displays posts of all followed people	As expected
4	Check Posts	Title, display text, actual text, image	Post created and saved	As expected
5	Like posts	Button clicked	Post liked if unliked before, unliked if liked before	As expected
6	Find other users	username	Redirected to searched user account	failure
7	Comment on post	Comment text	Comment added	As expected

5. Conclusion and Future Recommendations

5.1. Lesson Learnt

In creating the online blogging system, we've learned some important lessons. First, listening to users and making changes based on their feedback is crucial for improving the platform. Second, ensuring accessibility for all users, including those with disabilities, is essential. Third, having effective tools for content moderation helps maintain a positive community atmosphere. Lastly, staying adaptable and keeping up with trends is key for the platform's success in a fast-changing digital world.

5.2. Conclusion

In conclusion, the development of an online blogging system represents a significant opportunity to harness the power of digital technology for creative expression, information sharing, and community building. By providing users with user-friendly platforms to publish content, interact with audiences, and explore diverse topics, online blogging systems empower individuals and organizations to amplify their voices and connect with others on a global scale. While challenges such as content moderation, monetization, and accessibility remain, the evolving landscape of blogging continues to offer exciting possibilities for innovation and collaboration. As we move forward, it is essential to prioritize user experience, inclusivity, and ethical practices to ensure that online blogging systems continue to thrive as vibrant and valuable tools for communication and engagement in the digital age.

5.3. Future Recommendations

As the Project comes up with some limitation which can be improved in future and further more advancement can also be made. The different features that can be added are as follows:

- Videos should also be able to be uploaded
- Live support should be enabled.

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