

# **1. Introduction**

In today's modern world, technology has revolutionized the way we communicate, work and share ideas. It has made connecting with others more accessible and convenient. With the growing popularity of online platforms, content creation and sharing are no longer confined to traditional media. Our project proposal focuses on creating a simple and easy to use blog portal that allows individuals to express themselves and share their thoughts with a wider audience.

Our blog portal is designed to provide a user-friendly space where anyone can create and publish content on various topics. Whether you're passionate about writing, eager to share your experience, or looking to connect with like-minded people, our platform is here to support your unique voice and give you the freedom to manage your content.

Additionally, our blog portal will offer a range of features to enhance the blogging experience, including categories for organizing content and roles such as admin and co-admins. These roles will have the ability to update, delete or publish blog posts, ensuring that content is well-managed and up to date. These tools will help users maintain a structured and dynamic platform, fostering a vibrant community where ideas can flourish and discussions can thrive.

In conclusion, our project proposal focuses on building an easy-to-use blog portal that meets the needs of content creators in today's tech-driven world. We aim to make content creation accessible, flexible, and enjoyable by leveraging the power of online platforms.

# **2. Problem Statement**

Many existing blog platforms fail to cater to the diverse needs of content creators. Users often struggle with disorganized content, limited functionality for managing content, which can lead to cluttered hard to navigate blogs. Additionally, limited roles and permissions make it challenging for teams or multiple authors to collaborate effectively. These limitations can result in poorly managed content, reduce reader engagement and missed opportunities for creative expression. To overcome these challenges, we propose the creation of a blog portal designed for ease of use and comprehensive content management. Our platform will offer a clean, intuitive interface that allows users to categorize and manage their posts efficiently. With defined roles such as admin and co-admins, will have the ability to update, delete or publish blogs, ensuring that

content remains organized and relevant. By providing a structured environment for content creation and collaboration, our platform aims to enhance user engagement and create a more organized and vibrant blogging experience. Our objective is to develop a versatile blog portal that supports creators in sharing their ideas and connecting with their audience, regardless of their level of experience or technical knowledge.

### **3. Objectives**

The objectives for blog portal are as follows:

- Develop a user-friendly blog platform that addresses the challenges of content management and collaboration in existing blogging platforms.
- Create an intuitive interface that allows users to easily categorize, manage and publish their content.
- Ensure the platform is accessible and easy to use for all users, regardless of their technical expertise or background.
- Promote teamwork and collaboration by offering role-based permissions that facilitate multi-author contributions.

### **4. Methodology**

#### **4.1. Requirement Identification**

##### **4.1.1. Study of Existing System**

The study of existing blog platforms provided valuable insights into their strengths and weaknesses. We found variations in content management, user roles, and collaborative features. Some platforms lack effective tools for organizing content and supporting multi-author blogs, while others offer limited customization and control over publishing. Our project aims to address these gaps by prioritizing intuitive content management, flexible role-based permissions, and user-friendly design.

##### **i. WordPress.com:**

WordPress is a widely used blogging platform known for its robust content management system and extensive customization options. It offers a range of themes and plugins to enhance functionality, making it a versatile choice for bloggers. However, managing roles and permissions can be complex, and there is a learning curve for new users.

##### **ii. Blogger.com:**

Blogger is a free, user-friendly platform ideal for beginners. It offers basic blogging tools and an easy setup process. However, it has limited features for advanced users,

particularly in content management and collaboration. The platform lacks the ability to assign detailed roles or permissions, and the customization options are minimal, which may not meet the needs of more experienced bloggers or team.

**iii. Medium.com:**

Medium is a popular platform focused on simplicity and ease of use, offering a clean and minimalist design which provides a seamless writing experience and built-in audience engagement tools. However, medium has limited customization options and lacks advanced content management features. The platform is also less flexible in terms of user roles, making it difficult to manage content and customize the publishing process.

**4.1.2. Requirement Analysis**

**i. Functional Requirements**

Functional requirements for Blog Portal outline the specific features and capabilities which define what the system needs to accomplish in terms of user roles, content management, user interface, collaboration tools, and other essential functionalities. By meeting these requirements, our platform will deliver a seamless and user-friendly blogging experience.

- a. User Registration and Authentication
- b. Content Creation and Management
- c. Role-Based Permissions
- d. User-Friendly Interface
- e. Collaboration and Publishing Tools

**ii. Non-Functional Requirements**

Non-functional requirements for Blog Portal define the quality and performance aspects. These requirements ensure that the platform not only functions correctly but also provide a reliable and positive user experience. They cover aspects such as usability, performance, security, compatibility, and scalability, ensuring the platform operates smoothly, securely, and efficiently.

- a. User-Friendly Interface
- b. Performance and Responsiveness
- c. Security and Privacy
- d. Compatibility
- e. Scalability

### **iii. System Requirements**

#### **Software Configuration**

1. Operating system: Windows
2. Technology:
  - i. Front end: HTML, CSS, Tailwind CSS, JavaScript
  - ii. Back end: PHP
  - iii. Database: MySQL
3. Server: Apache

#### **Hardware Configuration**

1. Processor: Intel Core i5 or higher
2. RAM: 8.00 GB RAM or more
3. Hard Disk: 512 GB

## **4.2. Feasibility Study**

A feasibility study assesses whether our project is practical and achievable. It helps us determine if the blog portal is worth pursuing within the given constraints. The task includes evaluating time, budget, and resources to ensure the project's viability. The feasibility analysis for our project is as follows:

### **i. Technical feasibility**

For our blog portal, technical feasibility involves evaluating the resources and technology required to develop the platform. With the necessary infrastructure, appropriate software and hardware components, and the skills of capable developers, we have the means to successfully create the blog portal as a group project.

### **ii. Operational feasibility**

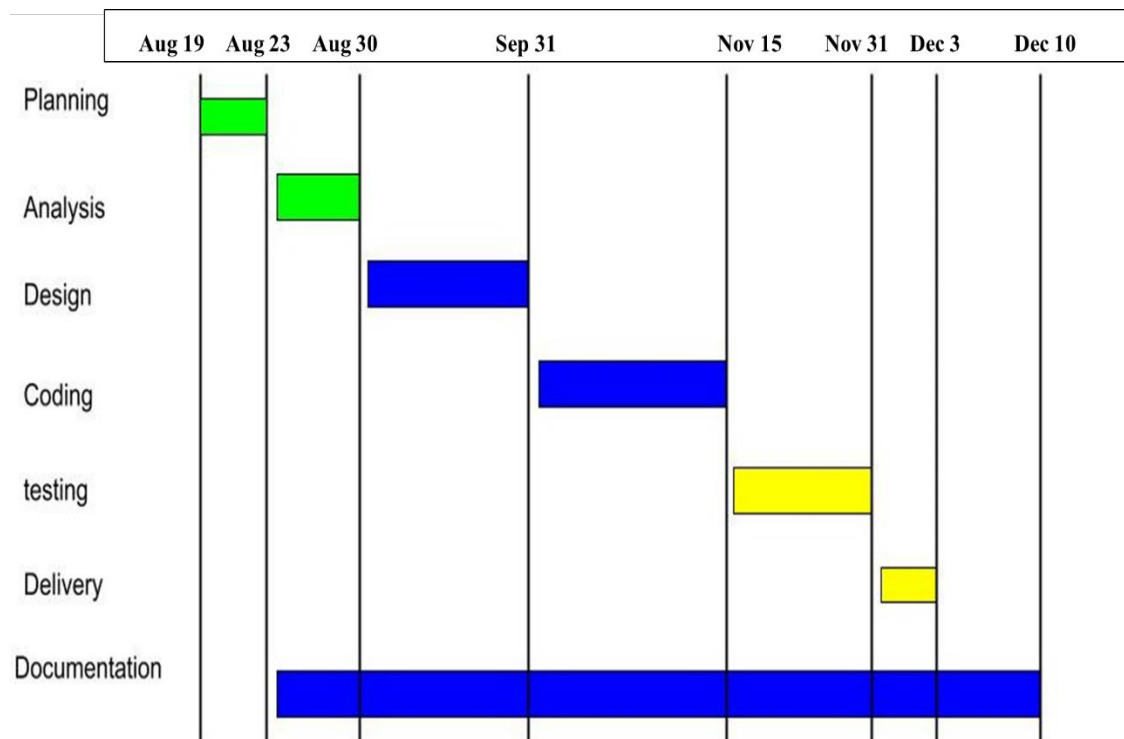
Our blog portal is designed to seamlessly integrate into the existing content management workflow, prioritizing user experience and ease of use. It aligns well with our objectives, offering a straightforward and intuitive platform for Admins and co-admins to manage content effectively while enhancing collaboration and engagement.

### iii. Economic Feasibility

We have conducted a detailed analysis of the project's costs, including development, maintenance, and potential expenses. Given the scope and scale of the project, the blog portal is economically feasible and can be sustained within budget constraints.

## 4.3. Schedule Feasibility

### 4.3.1 Gantt chart



*Figure: Gantt chart for Blog Portal*

## 4.4. High-Level Design of System

For our blog portal, the High-Level Design (HLD) will outline the system architecture and provide an overview of how the platform will function and its key features. The system will be developed using modern web technologies such as HTML, CSS, JavaScript, Tailwind CSS PHP and SQL. Following are the high-level components of the system design:

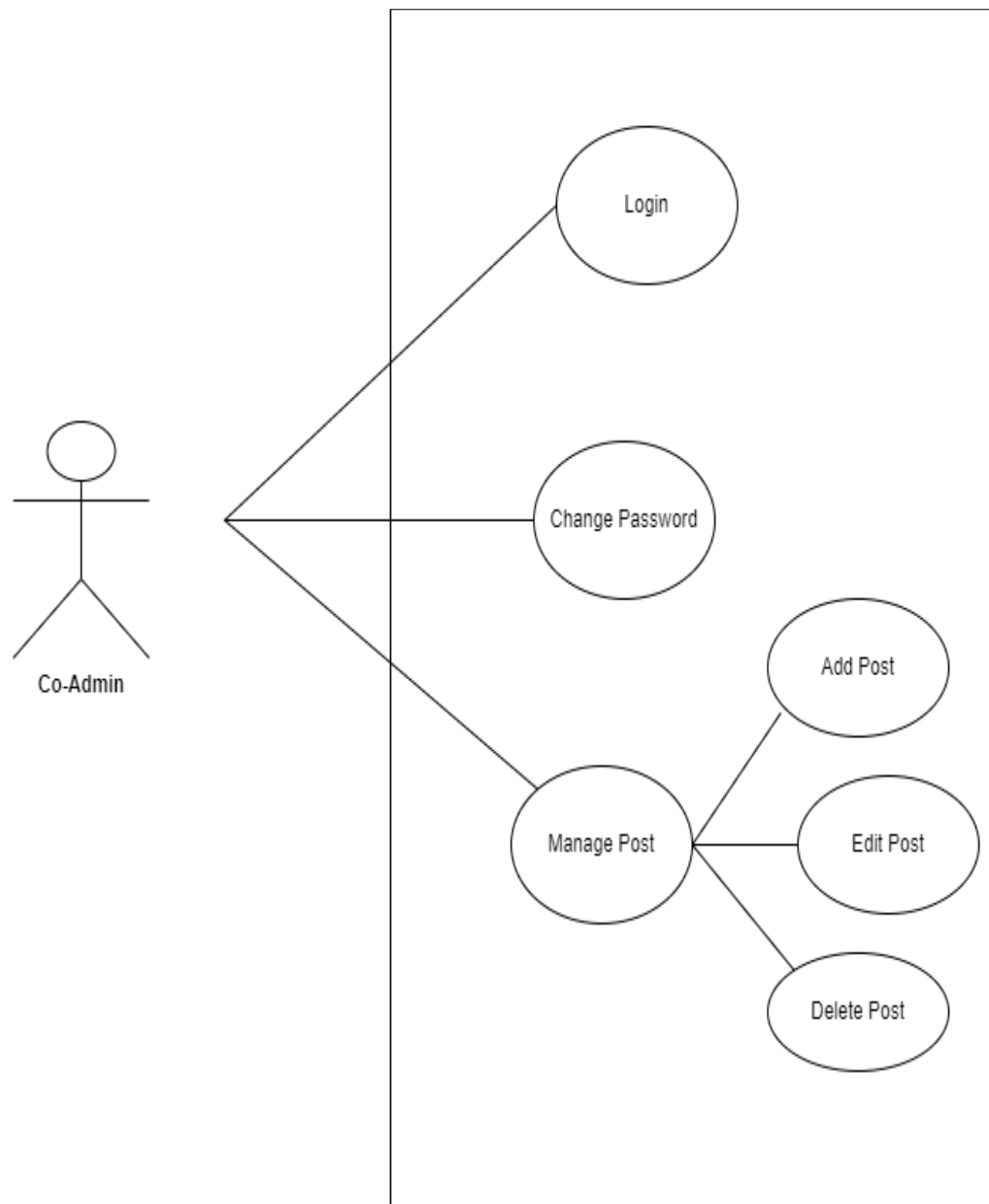
- Log in to the system
- Change password
- Admin panel
- Blog management (Create, Update, Delete)
- Content Organization (Categorize blogs, Search functionality)

#### 4.4.1. Use Case Diagram

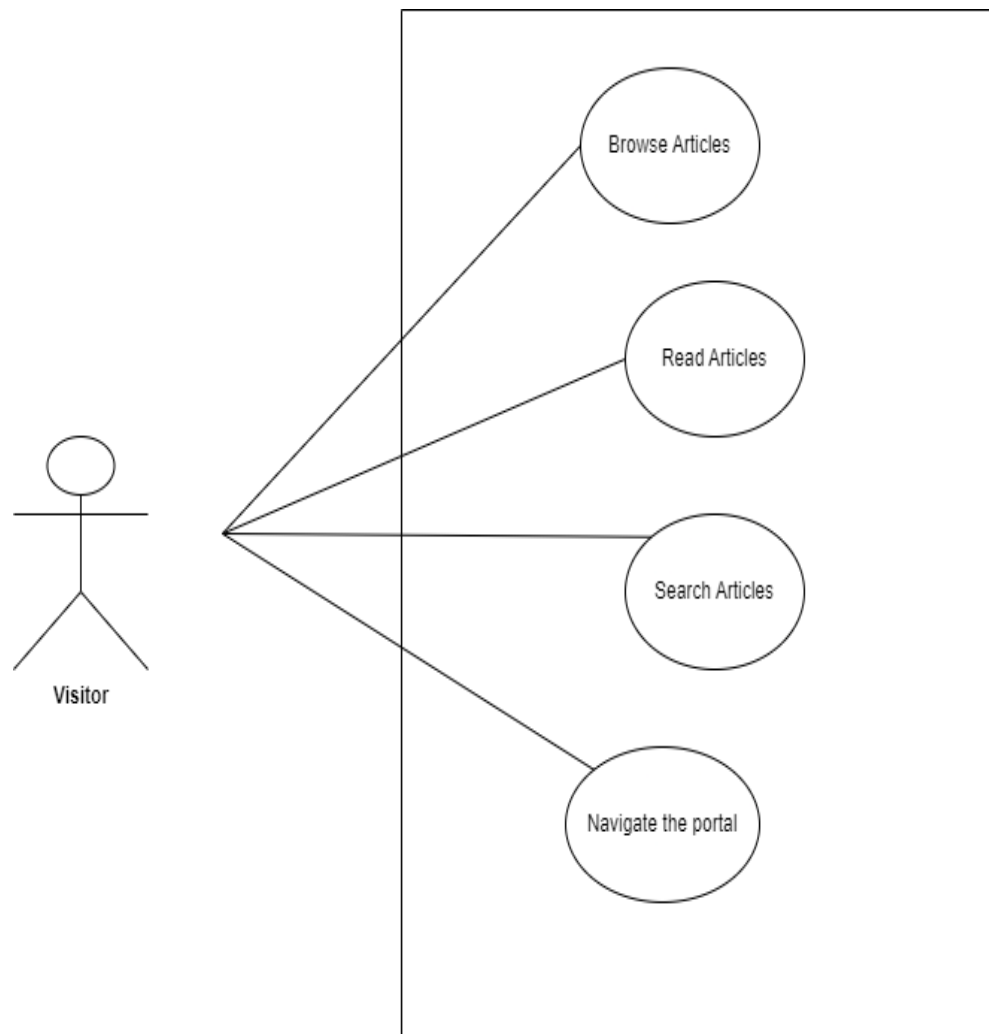
The Use Case diagram for our system is as follows:



***Figure: Use Case diagram of admin***



***Figure: Use Case diagram of co-admin***

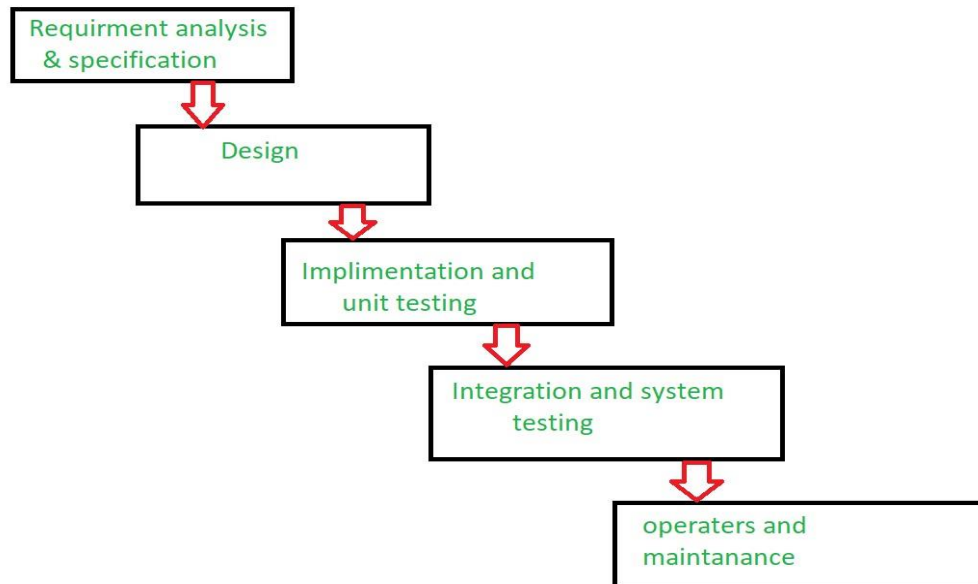


***Figure: Use Case diagram of Visitor***



#### 4.4.2. Software Development Model

The waterfall model is a traditional way of developing software. It follows a step-by-step approach, where each step depends on the completion of the previous one. It's called "waterfall" because the progress moves steadily downwards, like a waterfall.

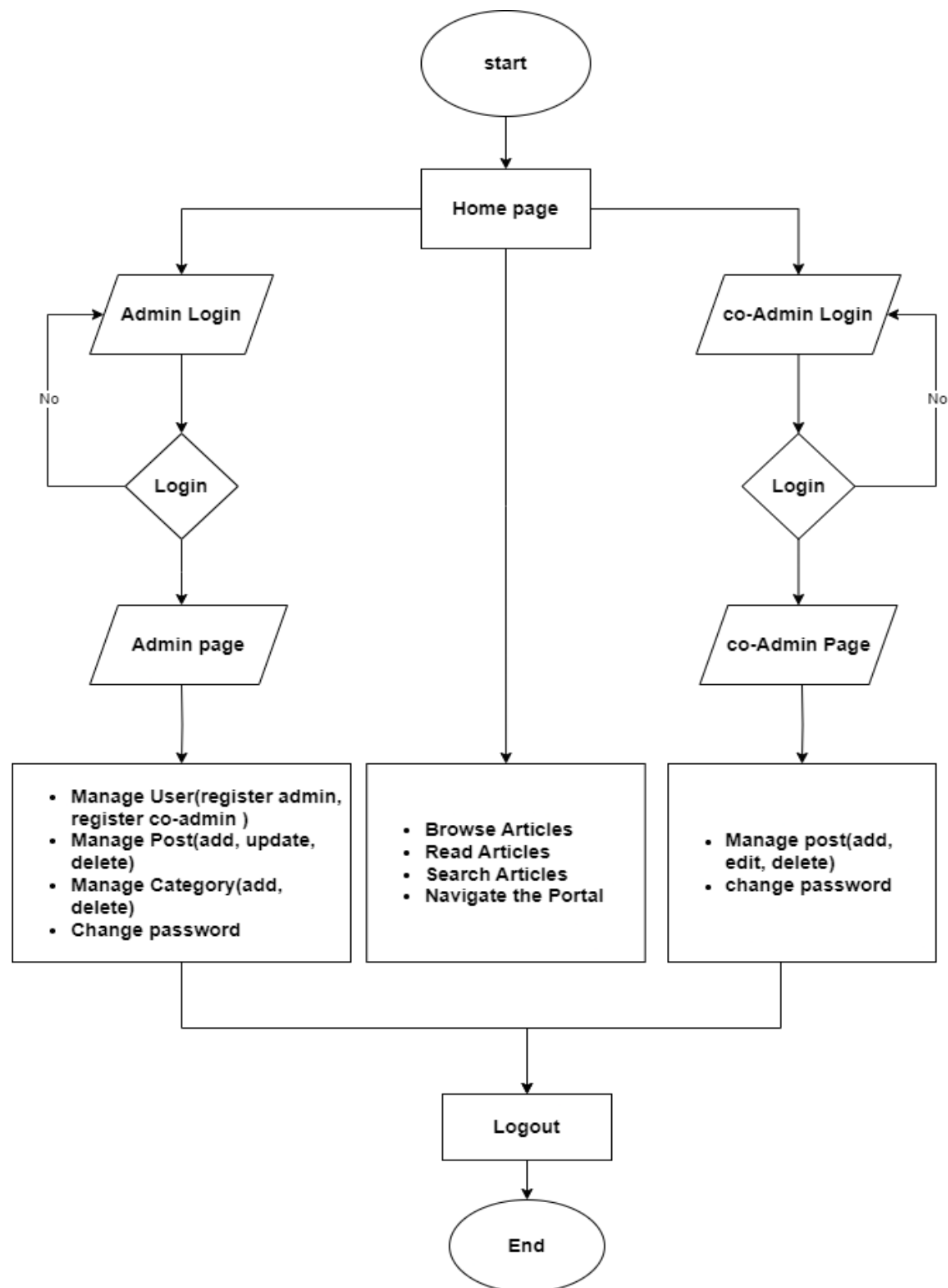


*Figure: Waterfall Model*

- **Requirement gathering and analysis:** Collecting and documenting all the necessary system requirements.
- **System design:** Creating a plan for the system based on the gathered requirements.
- **Implementation:** Developing and testing the system in small parts.
- **Testing:** Combining the developed parts into a complete system and testing it for any issues.
- **Deployment of the system:** Making the system available to customers or releasing it on the market.
- **Maintenance:** Fixing any problems that arise in the customer environment and releasing updates to improve the system.

#### 4.4.3. Flow chart Diagram

The flow chart diagram for our Blog portal is as follows:



*Figure: Flowchart for online learning portal*

## 5. Expected Outcome

Our Blog portal aims to streamline blog management by automating various functions and providing a user-friendly interface. It will offer the following features:

- **Login:** Admins and Co-Admins can securely access their accounts using a username and password.
- **Category Management:** Admins can add, edit, and delete blogs and categories.
- **Blog Management:** Admins can publish, add, delete, and edit articles.
- Co-Admins can manage only their blogs.
- **User Management:** Admins can register new Co-Admins or Admins and manage user accounts.
- **Account Management:** Both Admins and Co-Admins can update their login credentials and change their password.

## **6. References / Citation**

- [1] “Draw.io”[Online].Available:<https://app.diagrams.net/>. [Accessed:Aug 16,2024]
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- [3] “Medium” [Online].Available: <https://www.blogger.com/>. [Accessed:Aug 17,2024]
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