**Mini-Project Synopsis**

**Advanced Programming Lab (ICT 3166)**

**1.** **Project Title:**

BLOGIFY

**2.** **Team Members:**

| **Sl#** | **Full Name** | **Reg#** | **Roll#** | **CCE section\_name** |
| --- | --- | --- | --- | --- |
| **1** | Rishabh Jain | 210953080 | 20 | C1 |
| **2** | Bhavya Jain | 210953176 | 28 | C1 |
| **3** | Shouvik Shome | 210953174 | 27 | C1 |

**3.** **Abstract**

Blogging has evolved from its humble beginnings as personal online diaries into a powerful platform for sharing knowledge, expressing creativity, and building communities. Our website explores the essence of blogging as a digital medium for communication and self-expression. It delves into the multifaceted world of blogging, highlighting its significance, evolution, and impact on society.

The application underscores the democratizing potential of blogging, empowering individuals and marginalized voices to share their stories and perspectives. It recognizes the role of blogs in knowledge dissemination and opinion formation, fostering a global dialogue.

In conclusion, the enduring relevance of blogging as a powerful tool for self-expression, community-building, and societal change. It invites readers to delve into the ever-expanding blogosphere,where the convergence of technology, creativity, and connectivity continues to redefine the way we communicate and connect in the digital age.

**4.** **Project Details:**

This project introduces a user classification system, dividing users into two distinct categories: anonymous users and logged-in users. Anonymous users are granted the privilege to read posts, access individual blog pages for reading, and utilize basic reading features. In contrast, logged-in users enjoy extended privileges, including the ability to create posts, access all their personal posts, engage with posts through interactions, and subscribe to bloggers. Additionally, a comprehensive search functionality has been implemented to cater to the needs of all user types.

Blogify prides itself on providing an immersive and user-centric environment for diving into the captivating realm of blogging. Irrespective of their user type, all visitors can seamlessly explore a diverse array of blogs, delve into the nuanced realm of likes and dislikes associated with individual posts, and employ a powerful keyword-based search functionality to unearth posts of particular interest. For those seeking an elevated experience, Blogify extends the opportunity to create a logged-in user account through a straightforward registration process using their Email ID. Once logged in, users unlock an array of enhanced features, including access to a personalized dashboard where they can fine-tune their profile details, peruse their own collection of blogs, and delve into comprehensive blog analytics. The power to craft and edit posts, specifically those they own, adds to the allure of the platform. Moreover, users can actively engage with the vibrant blogging community by expressing their appreciation through likes or subscribing to their favorite bloggers, fostering a sense of connection and community within the Blogify ecosystem.

**5.** **Expected Result:**

Expected results from Blogify are that:

1. AUDIENCE ENGAGEMENT:

Our blogging website will attract and engage a targeted audience. This includes regular visitors who read, comment on, and share the blog posts. High engagement indicates that a specific post or content is resonating with the audience.

1. TRAFFIC GROWTH:

Increasing the number of visitors to the blog over time. This can be achieved through various means, such as search engine optimization(SEO), social media promotions, and email marketing in the deployment phase of our website.

1. CONTENT QUALITY:

Bloggers can often aim to create high-quality, informative, and valuable content that resonates with their readers. This can help establish authority and credibility in a particular niche.

1. BRAND BUILDING:

Blogging can be a powerful tool for building a personal or business brand. The expected result may be increased brand awareness, reputation, and trust among the target audience after Blogify gets deployed.

1. FEEDBACK AND IMPROVEMENT:

Bloggers often seek feedback from their audience to improve their content and website. The expected result may be a continuous cycle of improvement based on feedback.

**6.** **Python Concepts used:**

1. *Python Flask* :

The web application made is solely based off of the Python-based Micro-Framework Flask implemented on Werkzeug and Jinja2. Advantages of using Flask framework are: There is a built-in development server and a fast debugger provided.

1. *Exception Handling* :

The application ensures usage of extensive care while handling errors and exceptions during the workflow or the system. This includes attending to unhandled exceptions and provisions for safety mechanisms managing data intrusion.

1. *Object-Oriented Programming* :

Blogify is a departmentalized and distributed application which is modularized into components whose collaboration makes it a working project. This includes form classes, models classes, routes classes etcetera.

1. *Flask-Mail* :

We have advocated a mailing feature to implement 2FA authentication mechanisms and add a blog-subscription feature based completely on this feature. This uses SMTP servers to perform this task and broadcast emails for update synchronization.