

## **Problem Definition:**

The problem you're addressing is the need to create a personal blog website and host it on IBM Cloud using static web apps. This involves several challenges:

1. **Content Creation:** You need to regularly produce and publish blog posts, which may include text, images, and possibly multimedia elements.
2. **Website Development:** Building a static website requires designing an appealing user interface, organizing content, and ensuring responsive design for various devices.
3. **Hosting and Deployment:** Deploying your website on a reliable and scalable platform like IBM Cloud Static Web Apps is essential for performance and accessibility.
4. **Domain Management:** You'll likely want to use a custom domain for your blog, which involves domain registration and configuration.
5. **User Engagement:** Engaging your audience through comments, social media integration, and email subscriptions is important for the success of your blog.

## **Abstract:**

This personal blog project aims to explore the creation of a static web app hosted on the IBM Cloud using cloud computing services. The blog will document the journey of setting up and deploying a static website, emphasizing the use of IBM Cloud services for hosting and infrastructure. This project serves as a practical guide for individuals interested in building and hosting their own websites using cloud technologies.

## **Objectives:**

1. Understand the fundamentals of cloud computing and its relevance in web hosting.
2. Explore the features and benefits of IBM Cloud as a hosting platform for static web apps.
3. Create a step-by-step guide for setting up a static website using popular web development tools and frameworks.
4. Demonstrate how to leverage IBM Cloud services, such as Cloud Object Storage and Cloud Foundry, to deploy and manage the web app.
5. Highlight best practices for optimizing the performance, security, and scalability of the website.
6. Share personal insights and experiences throughout the project to provide practical tips and troubleshooting guidance.

## **Methodology:**

1. **Research and Study:** Begin by researching cloud computing concepts and the specific offerings of IBM Cloud. Understand the advantages of static web apps and their suitability for cloud hosting.
2. **Environment Setup:** Set up the necessary development environment, including installing code editors, version control tools, and any required software.
3. **Web Development:** Create a static website using popular web development technologies like HTML, CSS, and JavaScript. Explore the use of static site generators for efficient content management.
4. **IBM Cloud Setup:** Sign up for an IBM Cloud account, create a project, and configure the required services, such as Cloud Object Storage for hosting web assets.
5. **Deployment:** Deploy the static website to the IBM Cloud using suitable deployment methods, which may involve using Cloud Foundry or other relevant tools.
6. **Optimization and Testing:** Optimize the website for performance, security, and scalability.

Test the website under various conditions to ensure it meets the objectives.

7. Documentation: Create a comprehensive blog series documenting each step of the process, supported by screenshots and code snippets for clarity.

8. Sharing and Feedback: Share the blog series online and encourage feedback and questions from the community. Engage with readers to address their queries and provide assistance.

9. Conclusion and Future Work: Summarize the key findings and lessons learned from the project. Discuss potential future enhancements and explore advanced cloud computing features.

## **Design Thinking Approach:**

### 1. Empathize:

- Understand your target audience. Who are your potential readers, and what are their interests?
- Research existing personal blogs to identify successful design and content strategies.
- Gather user feedback on your blog concept and design.

### 2. Define:

- Clearly define the objectives of your blog. What topics will you cover? What is the tone and style of your content?
- Specify the technical requirements, such as the choice of static site generator (e.g., Jekyll, Hugo) and any special features you want to include.

### 3. Ideate:

- Brainstorm design concepts and layouts for your blog.
- Explore potential features like a search bar, related posts, and navigation menus.
- Consider how to make your content visually appealing through images, fonts, and color schemes.

### 4. Prototype:

- Create wireframes or mockups of your blog's design using tools like Figma or Adobe XD.
- Experiment with different layouts and styles to find the most engaging design.

### 5. Test:

- Share your prototypes with a small group of potential readers or friends to gather feedback.
- Test the performance of your chosen static site generator and hosting platform (IBM Cloud Static Web Apps) to ensure your blog loads quickly and reliably.

### 6. Implement:

- Develop your blog website based on the finalized design and features.

- Configure your custom domain and set up DNS records to point to your IBM Cloud hosting.

7. Iterate:

- Continuously monitor your blog's performance and user engagement.
- Collect feedback from readers and make iterative improvements to your content and design.

8. Launch:

- Publish your blog to the IBM Cloud Static Web Apps platform.
- Promote your blog through social media and other marketing channels to attract readers.

By following this design thinking approach, you can create an engaging personal blog hosted on IBM Cloud that resonates with your target audience and provides a great user experience.