**Project Title:** Personal Travel Blog on IBM Cloud Static Web Apps

**Abstract:**

Traffic congestion is the most common problem in the majority of the countries around the world due to increased population and urbanization. Traffic blockage is mainly due to the increased number of vehicles, poor infrastructure, and failure of existing systems. There are several techniques to identify the congestion of traffic such as image processing, laser tracking, and inductive loop. But, there are significant problems with the available methods and hence, the proposed model makes use of infrared sensors, which plays a constructive role to handle the traffic. Infrared sensors are used to count the density of automobiles using which the signals are controlled by ESP8266-based Node MCU and the data is sent to the central cloud system.

**Problem Statement:** The project aims to create a personal travel blog hosted on IBM Cloud Static Web Apps. The objective is to inspire and inform readers about travel adventures, tips, and experiences through engaging content and captivating photos. This project involves designing the blog structure, creating appealing content, setting up the IBM Cloud Static Web Apps environment, and ensuring the blog's ease of maintenance and updates.

**Design Thinking:**

1. **Content Planning:**
   * Define the blog's structure, including the following sections:
     + **Travel Stories:** Share personal travel experiences and narratives.
     + **Travel Tips:** Provide practical advice and tips for fellow travellers.
     + **Photos Gallery:** Curate a visually appealing collection of travel photos.
     + **Interactive Map:** Include an interactive map displaying the places visited.
   * Plan content categories, tags, and navigation for seamless user experience.
2. **Content Creation:**
   * Research and compile engaging travel stories from personal experiences.
   * Create informative and well-structured travel tips and advice articles.
   * Curate high-quality and captivating photos to accompany the content.
   * Ensure consistent voice and style across all blog posts.
3. **Website Design:**
   * Design the blog layout using HTML and CSS, ensuring responsiveness.
   * Implement interactive elements such as the interactive map using JavaScript.
   * Design an aesthetically pleasing and responsive layout for the blog using HTML and CSS.
4. **IBM Cloud Setup:**
   * Create an IBM Cloud account if not already done.
   * Register a domain name (if necessary) and configure DNS settings.
   * Set up a Static Web App environment on IBM Cloud to host the blog.
   * Configure domain settings and ensure secure HTTPS access.
   * Establish a reliable and scalable hosting infrastructure.
5. **Content Management**
   * Begin creating and curating travel content, starting with a few initial posts
   * Choose an appropriate Content Management System (CMS) or static site generator to streamline content updates.
   * Enable version control for tracking changes and revisions.
   * Set up regular backups and content archiving for data security.

Phase 1: Problem Definition and Design Thinking

In this part you will need to understand the problem statement and create a document on what have you understood and how will you proceed ahead with solving the problem. Please think on a design and present in form of a document.

Project Definition: The project involves using IoT devices and data analytics to monitor traffic flow and congestion in real-time, providing commuters with access to this information through a public platform or mobile apps. The objective is to help commuters make informed decisions about their routes and alleviate traffic congestion. This project includes defining objectives, designing the IoT traffic monitoring system, developing the traffic information platform, and integrating them using IoT technology and Python.

Design Thinking:

Project Objectives: Define objectives such as real-time traffic monitoring, congestion detection, route optimization, and improved commuting experience..

IoT Sensor Design: Plan the deployment of IoT devices (sensors) to monitor traffic flow and congestion.

Real-Time Transit Information Platform: Design a web-based platform and mobile apps to display real-time traffic information to the public.

Integration Approach: Design a web-based platform and mobile apps to display real-time traffic information to the public.