Report: Creating a Static Travel Blog Website Using Jekyll in IBM Cloud

1. Introduction

The purpose of this report is to provide a detailed step-by-step guide on how to create a static travel blog website using Jekyll, a popular static site generator, and host it on IBM Cloud. This guide is aimed at individuals who are new to web development and cloud hosting. We will begin from the very basics and cover the entire process in a systematic manner.

2. Prerequisites

Before getting started, there are a few prerequisites:

- An IBM Cloud account. If you don't have one, you can sign up for a free account on the IBM Cloud website.

- A computer with Ruby, Bundler, and the IBM Cloud CLI installed.

- Basic knowledge of Markdown and HTML/CSS for customizing your website.

3. Setting up the Development Environment

3.1. Installing Required Tools

Before diving into Jekyll and IBM Cloud, you need to install some essential tools:

- Ruby: Ensure you have Ruby installed. You can check this by running `ruby -v`. If it's not installed, download and install Ruby from the official website.

- Bundler: Install Bundler using the following command:

```bash

gem install bundler

```

- IBM Cloud CLI: Download and install the IBM Cloud CLI from the IBM Cloud website.

4. Creating a Jekyll Project

4.1. Creating a New Jekyll Project

Now that we have the necessary tools, we can create our Jekyll project:

- Open your terminal and navigate to the directory where you want to create your project.

- Execute the following commands:

```bash

gem install jekyll

jekyll new mytravelblog

cd mytravelblog

```

This will create a new Jekyll project named "mytravelblog" and change your working directory to the project folder.

5. Customizing Your Blog

5.1. Editing Configuration and Layout

Customizing your travel blog involves editing the configuration file (`\_config.yml`) and templates in the `\_layouts` and `\_includes` directories. You can make changes to the site's title, description, and other settings in the `\_config.yml` file.

5.2. Adding CSS and Images

To personalize the look and feel of your blog, you can add your own CSS styles and images to the project. Place your custom CSS files in the `\_sass` directory and update your layout files to reference them.

6. Adding Blog Posts

6.1. Creating Blog Posts

To add blog posts, create Markdown (.md) files in the `\_posts` directory. Each file should follow the format `YYYY-MM-DD-title.md` and contain your blog post content in Markdown format.

For example:

- Create a new file in the `\_posts` directory:

```bash

touch \_posts/2023-11-01-my-first-post.md

```

- Open the file and add your blog post content in Markdown format.

7. Testing Your Website Locally

You can preview your website by running the following command in your project directory:

```bash

bundle exec jekyll serve

```

This will start a local web server, and you can view your website by opening a web browser and navigating to `http://localhost:4000`.

8. Setting Up IBM Cloud

8.1. Logging into IBM Cloud

Before deploying your website, you need to set up an IBM Cloud environment:

- Log in to IBM Cloud using the Cloud Foundry CLI by running:

```bash

cf login

```

8.2. Targeting Your Space

Target your desired space within IBM Cloud. If you don't have a space, you can create one using the IBM Cloud Dashboard.

9. Deploying Your Website to IBM Cloud

9.1. Building Your Website

To deploy your Jekyll website to IBM Cloud, you need to build it first. Run the following command to build your website with the production environment settings:

```bash

JEKYLL\_ENV=production bundle exec jekyll build

```

9.2. Pushing to IBM Cloud

Next, push your website to IBM Cloud by running:

```bash

cf push mytravelblog -b staticfile\_buildpack

```

Replace `mytravelblog` with your desired app name.

10. Accessing Your Live Website

Once your website is successfully deployed, you can access it using the URL provided by IBM Cloud. Your travel blog is now live and accessible to the world.

11. Updating Your Blog

You can continue to update your blog by adding new posts or making changes to the site's content and layout. Be sure to rebuild and redeploy your website when making changes to reflect them on the live site.

12. Conclusion

In conclusion, this report has provided a detailed, step-by-step guide for creating a static travel blog website using Jekyll and hosting it on IBM Cloud. Starting from setting up the development environment to deploying your website, this guide should help beginners in web development and cloud hosting successfully create and manage their travel blog website.

For more in-depth details and troubleshooting, please refer to the official Jekyll and IBM Cloud documentation. Happy blogging!