A

Project Report on

**WEBHOSTING-IN-IBM-CLOUD**

**(Elective Module: 1)**

Submitted in partial fulfillment of completion of the course

Advanced Diploma in IT, Networking and Cloud Computing

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Year 2024

**PROJECT OVERVIEW**

**ACKNOWLEDGEMENT**

We would like to express our sincere gratitude to all those who have supported and contributed to the successful completion of this project. Your assistance and encouragement have been invaluable throughout this journey.

First and foremost, we want to thank my project supervisors, Arpita Roy(Edunet) for their guidance, expertise, and unwavering support. Their insights and feedback have been instrumental in shaping the direction of this project.

We would also like to extend my appreciation to my fellow classmates who provided valuable input, shared resources, and engaged in stimulating discussions that enriched the project. Your collaborative spirit was a driving force behind our achievements.

Furthermore, we want to acknowledge our friends and family for their patience, understanding, and encouragement throughout this endeavor. Your support provided the motivation we needed to see this project through to its completion.

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This project has been a rewarding learning experience, and we are thankful for the collective efforts of everyone involved. Your support has been instrumental in making this project a reality.

Susma Kumari Singh,

NSTI KOLKATA

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**REQUIREMENTS**

* Windows 10/11
* IBM Cloud Account.
* Html file

**TECHNOLOGY STACK**

• Frontend static website.

• Programming Languages: , HTML, CSS, and JavaScript

• IBM CLOUD OBJECT STORAGE

**HARDWARE**

• Server: A dedicated server or cloud-based virtual machine (VM)

• CPU and RAM

• Storage: Adequate storage space for the database, application code, and uploaded files.

• Network Infrastructure: Reliable internet connectivity, firewalls, and security measures to protect the system.

**SOFTWARE**

• Operating System

• Html css java scripts

• Development Tools: Visual Studio Code

• IBM CLOUD

• OBJECT storage

• Version Control Tools: GitHub or GitLab

• Web Server

**DEPLOYMENT ENVIRONMENT**

• The size and complexity of the project

• The security requirements of the project

• The budget for the project

• The technical expertise of the team

**Introduction to the Problem**

**Hosting a Static File Portfolio on IBM Cloud:**

Creating and hosting a static file portfolio on IBM Cloud involves several steps. Here are common issues or challenges you might encounter:

**Cloud Object Storage Setup:**

**Problem:** Difficulty in setting up a Cloud Object Storage (COS) instance.

Solution: Ensure you follow IBM Cloud documentation to create a COS instance. Double-check your settings, including bucket configuration.

File Upload and Structure:

**Problem:** Issues with uploading static files or organizing them correctly in the COS bucket.

Solution: Verify that all necessary files (HTML, CSS, images) are uploaded. Confirm the correct structure and file paths.

Static Website Hosting Configuration:

**Problem:** Difficulty configuring COS for static website hosting.

**Solution:** Review the IBM Cloud documentation on setting up static website hosting. Confirm the correct configuration for the main page and error page.

Access and URL Issues:

**Problem:** Unable to access the hosted static website or facing URL-related problems.

**Solution:** Check the provided URL after setting up static hosting. Ensure your files are publicly accessible and permissions are set correctly.

**Documentation Reference:**

**Problem:** Confusion or lack of clarity in the IBM Cloud documentation.

**Solution:** Reread the relevant documentation sections. Look for community forums or support resources for additional guidance.

If you provide more specific details about the issue you are facing, I can offer more targeted assistance. Additionally, make sure to check the latest IBM Cloud documentation for any updates or changes in the hosting process

**Cost-Effective Hosting:**

IBM Cloud offers competitive pricing, and hosting a static file portfolio is generally more cost-effective than dynamic websites. You pay for the storage and bandwidth you use, making it suitable for personal portfolios or small projects.

**Scalability and Performance:**

IBM Cloud provides a scalable infrastructure. Your static files are distributed globally through Content Delivery Networks (CDNs), ensuring fast loading times for users around the world. This scalability ensures a seamless experience even as your portfolio grows.

**Reliability and Uptime:**

IBM Cloud is known for its reliability and high uptime. Hosting your portfolio on IBM Cloud ensures that your work is accessible to potential employers, clients, or visitors consistently without downtime issues.

**Security Features:**

IBM Cloud incorporates robust security measures, safeguarding your static files from potential threats. With features like encryption in transit and at rest, your portfolio data remains secure.

**Ease of Maintenance:**

Static files require minimal maintenance compared to dynamic websites. Once uploaded to IBM Cloud, your portfolio can be easily updated by replacing or adding files without complex server-side configurations.

**Developer-Friendly Environment:**

IBM Cloud provides tools and services that developers find user-friendly. Integrating services like Cloud Object Storage for file storage and hosting simplifies the development and deployment process.