Assignment: Cloud Adoption Case Study

Course Code: CSE4267
Title: Cloud Adoption Analysis for ABC Corp
Total Marks: 10
Submission Deadline: 24-10-2024

Case Study: ABC Corp

ABC Corp is a mid-sized company specializing in mobile app development. Recently, they secured a project to create a data-driven fitness application with real-time analytics. The project requires:

- A **webserver** to handle user requests.
- An **analytics server** to process large volumes of user-generated data.
- A **database server** to store structured and unstructured data securely.

However, the company faces the following constraints:

1. Limited office space for hosting new servers.
2. High upfront costs for purchasing high-performance servers.
3. Lack of skilled IT staff for managing on-premises infrastructure.
4. Tight project deadlines that do not allow for lengthy setup processes.

To overcome these challenges, the company is considering adopting **Public Cloud IaaS** for its infrastructure needs.

Assignment Questions

1. Cloud Suitability Analysis (3 Marks)

- Explain why Public Cloud IaaS is the most suitable solution for ABC Corp's requirements.
- List two benefits of adopting Public Cloud IaaS in overcoming the organization's constraints.

2. Resource Estimation (3 Marks)

- Identify the types of resources ABC Corp would need to deploy on the IaaS platform (e.g., servers, storage).
- Provide examples of how cloud features like scalability or pay-as-you-go pricing can benefit ABC Corp's project.

3. Challenges and Solutions (2 Marks)

- Highlight two potential challenges ABC Corp might face when using Public Cloud IaaS.
- Suggest practical strategies to mitigate these challenges.

4. Alternative Models (2 Marks)

- If ABC Corp later needs a more customized platform for developing future projects, which cloud service model (IaaS, PaaS, or SaaS) would you recommend?
- Provide reasoning for your recommendation.

Submission Guidelines

- **Format:** Submit your answers in a PDF.
- **Filename:** CSE4267_Assignment1_[YourName]_[StudentID].pdf
- **Method:** Upload to Google Classroom.
- **Deadline:** 24-10-2024.

Grading Criteria

Aspect	Marks Allocation
Accuracy of Answers	5
Logical Reasoning	3
Presentation and Clarity	2