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Class: IS 6640 -090 Networking and Servers

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Topic: Lab 5

Screenshot 1:A screenshot of a computer

Description automatically generated

Screenshot 2:

A screenshot of a computer

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Screenshot 3:

A white background with black text

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Screenshot 4:

A screenshot of a computer

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Screenshot 5:A screenshot of a computer

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**Question 1: AWS uses a ‘Shared Responsibility’ Model for their services, which means some portions of their service are managed by AWS and other portions are the responsibility of the customer. You may have heard in the news that data has been leaked from S3 buckets. Who is the responsible party for this type of data leak?**

The customer and AWS are responsible for data security and data leaks which also includes S3. AWS is mainly responsible for security of the cloud, meaning responsibility towards physical, network and infrastructure security. S3 data leaks mainly happen due to misconfiguration setting done by the customer. This could also include configuration access control policies, unintended public access, or misconfiguration bucket permissions.

**Question 2: As an AWS consultant you have recommended an organization create a policy to change the storage class of S3 objects based on how often they are accessed. Using the documentation from AWS, explain the benefits for the organization.**

The following are the benefits of creating a policy to change the storage class of S3 object based on how often it is used by the organization:

- Efficient Data Management.

- Improved Performance.

- Cost Optimization.

**Question 3: One of Amazon’s core principles is availability, and this is made possible through large data center centers all over the world. The othern quantifies this with two terms one is ‘AWS regions’ and the other is ‘Availability Zones’ explain the difference and name at least one region.**

AWS regions and availability zones are essential components of AWS infrastructure that enable high availability and redundancy:

AWS Regions: They are geographic areas in the world where AWS has located their data centers. Each region is completely isolated and independent of its own containing of multiple availability zones. AWS are available to give services in different geographic locations and allow users to deploy resources in a specific region.

Availability Zones: Availability Zones are in isolated data centers within an AWS region. They are designed to be physically separate from each other and connected by high speed, low-latency networks. The usage of Availability Zones allows AWS to offer redundancy and fault tolerance within a region.