Name: Harsh Yadav SAP ID: 500088021 Batch: CCVT B4

Architectural Styles

Week 2

the steps required to upload a cloud-based storage application on AWS:

- 1. Set up an AWS account: To use AWS services, you need to sign up for an AWS account. During the sign-up process, you need to provide your billing information and identity verification.
- Choose a storage service: AWS offers several storage services, including Amazon S3, Amazon EBS, Amazon EFS, and Amazon Glacier. Choose the one that best fits your needs and requirements.
- 3. Create a new S3 bucket: To store your data, you need to create an S3 bucket. To do this, go to the S3 section of the AWS Management Console and create a new bucket by specifying the bucket name and region.
- 4. Upload your data: You can use the S3 web interface, AWS CLI, or AWS SDKs to upload your data to the S3 bucket. You can also use the AWS Import/Export service to transfer large amounts of data to S3.
- Configure Access Control: Once you have uploaded your data, you need to configure the access control for your S3 bucket.
 You can use AWS Identity and Access Management (IAM) to

- set up bucket policies and access control lists (ACLs) to control who has access to your data.
- 6. Set up Monitoring: To monitor the performance and usage of your S3 bucket, you can use AWS CloudWatch. CloudWatch allows you to set up alarms and receive notifications if certain thresholds are exceeded.
- 7. Test your application: Once you have set up your storage infrastructure, test your application to make sure it is working correctly. You can use AWS Elastic Beanstalk to deploy and run your application on AWS.
- 8. Launch your application: After testing, you can launch your application and make it available to your users.

Why we choose AWS for hosting a cloud-based storage application:

- 1. Scalability: AWS offers scalable and flexible storage solutions, allowing you to easily increase or decrease your storage capacity based on your needs. This makes it easier to accommodate growth and changing demands.
- 2. Reliability: AWS provides highly available and durable storage solutions, ensuring that your data is safe and always available. This is particularly important for cloud-based storage applications that need to be accessible 24/7.
- 3. Cost-effective: AWS offers competitive pricing for its storage solutions, allowing you to lower your costs and maximize your return on investment.
- 4. Security: AWS has a robust security infrastructure in place to protect your data and applications. This includes encryption, access control, and monitoring, among other security features.

- 5. Global network of regions: AWS has a global network of regions, allowing you to store and access your data from anywhere in the world. This gives you the flexibility to choose the region that best fits your needs and requirements.
- 6. Integration with other AWS services: AWS integrates with other AWS services, allowing you to easily extend and enhance your storage application. For example, you can use Amazon S3 to store your data and Amazon RDS to store your database.
- 7. Large developer community: AWS has a large developer community, making it easier to find help and resources for building and deploying your storage application.

In conclusion, AWS provides a cost-effective, reliable, secure, and scalable platform for hosting cloud-based storage applications. These features, along with its global network of regions, integration with other AWS services, and large developer community, make AWS a popular choice for hosting cloud-based storage applications.