

## SCHOOL OF INFOCOMM TECHNOLOGY

Diploma in DS, IT, FI, CSF

**Cloud Architecture and Technologies (CAT)**

**April 2022 Semester**

**Assignment 1**

**20% of CAT Module – (Individual 100%)**

**09 May – 22 May 2022 (Weeks 4 & 5)**

**Deadline for submission:**

**SOFTCOPY:** Submit in BrightSpace by 22 May 2022, 23:59

**Penalty for late submission:**

**10%** of the marks will be deducted for each day (inclusive of Saturdays, Sundays and public holidays) after the deadline for softcopy submission.

Network Diagram:

Graphical user interface

Description automatically generated with medium confidence

Explanation:

In a AWS Cloud Server, there are different service available and for this assignment we are required to use DynamoDB to set out table for the Region which is N.Virginia. In the Region, there is a storage service known as S3 and also two available zone A and B to facilitate the entire network output. The Auto Scaling group consists of 3 web servers in which a total of 2 web server would be deployed first within the two zones. When the network output exceeds the rules in the Auto Scaling, the third web server will be deployed into either of the zones that is available and adds in the capacity needed.

S3 buckets is used as a central cloud object-storage service to contain 2 buckets. One is public and one is private. The public is accessible to public which contains lecture slides while the private is for internal usage and contains video of the auto-scaling servers under the network load.

DynamoDB is used as a NoSQL database which contains ‘Username’, ‘Password’ and ‘Email Address’ as the fields in the table.

NOSQL Table:

Graphical user interface, text, application, email, website

Description automatically generated

Video of EC2:

[CAT Assignment 1 Auto Scaling Video](https://connectnpedu.sharepoint.com/:v:/s/Selfrecording334/Ef332kCRNuRMgQAs4J_iio4BIrOc2N3E59-qBPMYktW6kA?e=Jv8Y8M)

(Use NP email to access it) ^

You may want to skip some waiting parts as it is a 14min video