



## **BSCS-6**

### **Site Reliability Engineering**

#### **Assignment1**

**Due Date: 18 March 2024 (11:55PM). Late submission is not allowed.**

**In case of cheating or plagiarism, assignment will be marked as zero.**

Case Study: On Tuesday, February 28th, 2017, the US-East-1 region of Amazon Web Services S3 saw a complete outage from 9:40am to 12:36pm PST. AWS S3 (Simple Storage Service) is a cloud object storage solution that many services rely on to store and retrieve files from anywhere on the web. In addition, many other AWS services that depend on S3 — Elastic Load Balancers, Redshift data warehouse, Relational Database Service and others — also had limited to no functionality. Similar to the repercussions of the AWS outage caused by a route leak in 2015, the S3 outage disrupted a large number of services that depend on AWS over the course of roughly 3 hours. These services included Quora, Coursera, Docker, Medium and Down Detector.

Go through the complete case study from internet and find out answers of the following questions in terms of SRE principles you have studied so far:

- a. What was the underlying cause of the outage?
- b. How was the issue resolved by AWS?
- c. What proactive measures could have been taken to avert such an incident?
- d. Reflect on the key takeaways derived from this incident.