

CSP 554 Big Data Technologies

Assignment – #1(Modules 01a & 01b)

A20517528

1. What was the problem with the Google flu detection algorithm?

Ans: The problem with the Google flu detection algorithm (GFD) was that the algorithm predicted more than twice the number of doctor visits for influenza-like illness (ILI) in comparison to the Centers for Disease Control and Prevention (CDC).

2. What is big data hubris?

Ans: Big data hubris is defined as an implicit assumption that big data can become substitute for, rather than being a supplement to, traditional techniques of data collecting and analysis. It has been asserted that there are enormous possibilities in big data.

3. What approach could have been used to improve the Google flu detection algorithm?

Ans: According to me, google flu detection algorithm issue could be resolved by combining it with other almost real-time health data. That is, we can improve the performance of GFD or the CDC by combining both GFD and lagged CDC data or by dynamically recalibrating GFT.

4. What is “algorithm dynamics?”

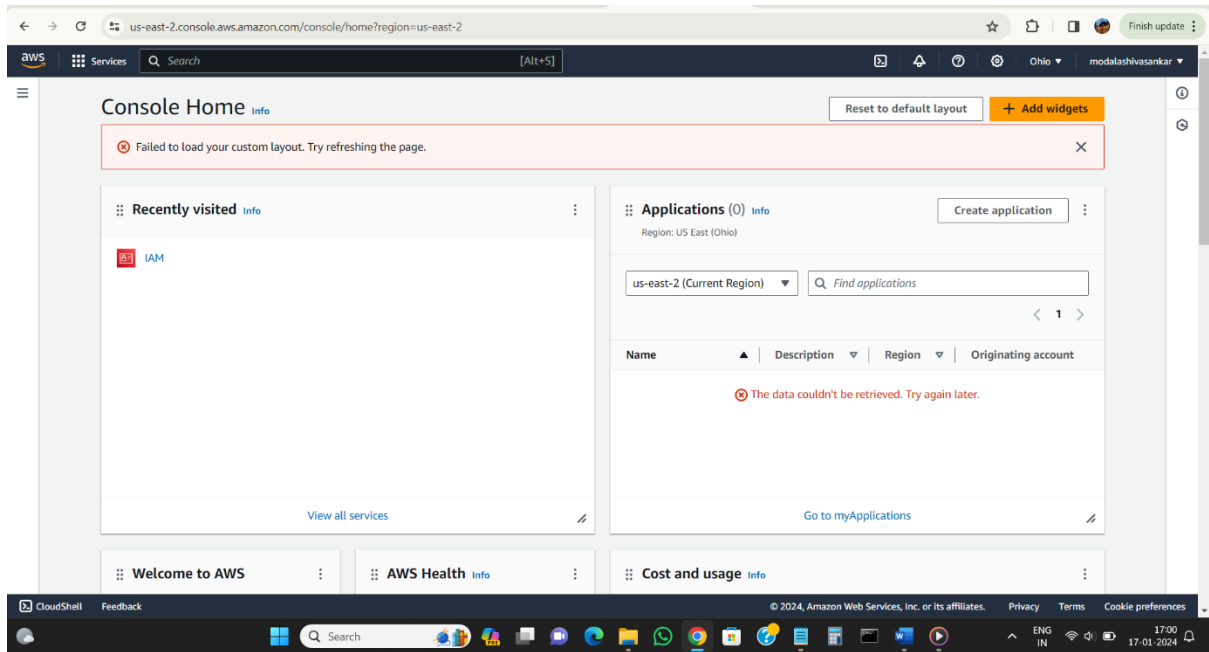
Ans: Algorithm dynamics can be defined as the modification or changes that engineers make to improve the commercial services as well as the ways consumers engage in those services, and a method for assessing basic structural characteristics of algorithms. It deals with the way algorithms change over the time.

5. What aspect of algorithm dynamics impacted the Google flu detection algorithm?

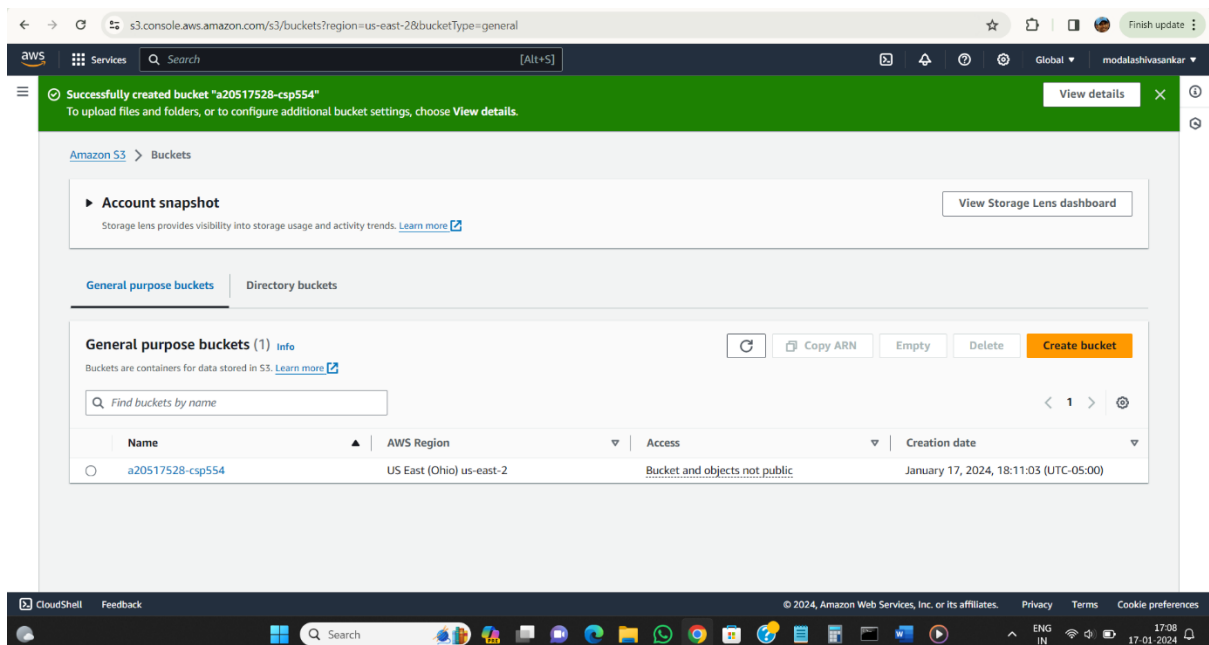
Ans: The algorithm dynamics that has impacted the google flu detection algorithm are several changes in Google’s search algorithm and the user behavior because GFD bases its model on relative abundance of search terms, changes to search algorithm may have a negative impact on its predictions. These changes had an impact on GFD tracking of influenza cases. This demonstrates the importance of algorithm dynamics to the systems operations.

Screenshots:

AWS Management Console Home Page



Creating the bucket:



Uploading an object into the bucket

The screenshot shows the AWS S3 console interface. At the top, a green banner indicates "Upload succeeded" with a link to "View details below." Below this, the "Upload: status" modal is open. It contains a summary section with the following data:

Destination	Succeeded	Failed
s3://a20517528-csp554	1 file, 230.1 KB (100.00%)	0 files, 0 B (0%)

Below the summary, there are tabs for "Files and folders" and "Configuration". The "Files and folders" tab is active, showing a search bar and a table with columns: Name, Folder, Type, Size, Status, and Error. The table currently shows 1 total file.

Empty a bucket

The screenshot shows the AWS S3 console interface. At the top, a green banner indicates "Successfully emptied bucket 'a20517528-csp554'" with a link to "View details below. If you want to delete this bucket, use the delete bucket configuration." Below this, the "Empty bucket: status" modal is open. It contains a summary section with the following data:

Source	Successfully deleted	Failed to delete
s3://a20517528-csp554	1 object, 230.1 KB	0 objects

Below the summary, there is a section titled "Failed to delete (0)" with a search bar and a table with columns: Name, Prefix, Version ID, Type, Last modified, Size, and Error. The table currently shows no failed object deletions.

Deleting a bucket

