National University of Computer and Emerging Sciences, Lahore Campus

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| C:\Users\saif\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\final design.jpg | **Course:** | **Parallel and Distributed Computing** | **Course Code:** | **CS-3006** |
| **Program:** | **BSCS & BSDS** | **Semester:** | **Spring 2024** |
| **Duration:** | **7 Days** | **Total Marks:** | **10** |
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| **Exam:** | **Assignment 04** | **Section:** | (6A) |

Name & Roll No:

**Muhammad Ahmad 21L-5617 BS(DS)**

Write a single page summary of the uploaded research paper “The Google File System”.

The GFS aspects are investigated in detail as well as the system performance metrics in the context of this debate.

First, the discussion illustrates how the data sizes in clusters X and Y are distributed into the reading, writing, and record append operations. Data tells many distinct features from task management strategies used by the two groups.

The workload of the chunk server tried to grasp the wide range of tasks these essential workers did from providing data chunking and maintaining all the necessary storage.

The story continues to discuss the firsthand experience gained from the whole process of the GFS implementation and application. The challenges, which actually range from the disk-related issues, through the single distro quirks up to the practical consideration that occurs with every of these steps, are revealed by the iterative learning process that these experiences enable.

Subsequently, the paper will be discussing some of the contemporary file systems together with other modern platforms that GFS will be interacting with so as to illustrate how the unique characteristics of GFS relate to those of the other distributed file systems.

The last thoughts confirm the efficiency of GFS as an indispensable tool for the processing of huge amounts of data, which is evident in its reliability, performance and transformative role in Google's data processing infrastructure.

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