MOUNT CARMEL COLLEGE AUTONOMOUS, BENGALURU
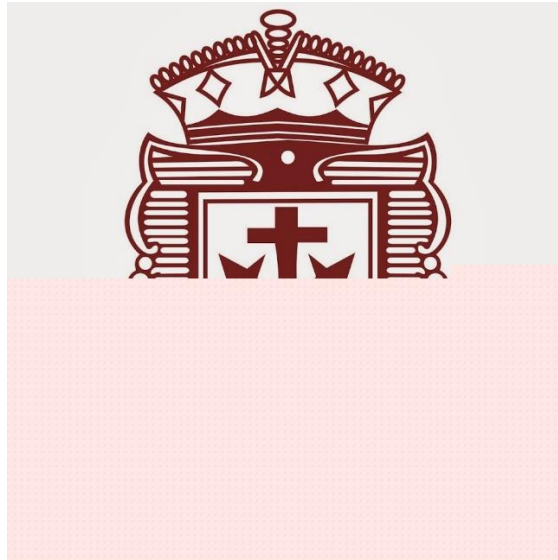

REPORT ON CLOUD COMPUTING WORKSHOP

PEER LEADING

Date: 30 SEPTEMBER 2023 & 07 OCTOBER 2023

Location: MOUNT CARMEL COLLEGE, UG LAB

Presenter: III MSc. STUDENTS

No. of Participants: 36

The Cloud Computing Workshop, organized by the 3rd MSc. students for the final year BSc. students, was a two-day event aimed at providing a comprehensive understanding of cloud computing and its practical applications. This report summarizes the content, activities, and outcomes of the workshop, which took place on 30/09/2023 and 07/10/2023

The workshop started with a word of God, setting a positive tone for the event and welcoming faculty of computer science department and students with warm greetings.

Workshop Highlights:

Topic	Presenter	Timings
Introduction to Cloud Computing	Thrupti	12:00-12:12
Basic terminologies of Cloud	Varshini	12:12-12:23
Architecture of Cloud	Aishwarya	12:23-12:26
Cloud Service Models	Akshaya	12:26-12:34
Types of Clouds	Megha	12:34-12:36
Applications of Cloud	Gayathri	12:55-1:05
Difference of Cloud Storage & Cloud Computing	Anushka	12:40-12:50
Hadoop Explanation	Simritha	01:05-01:17
Handson Session & Ubuntu Installation	Simritha	1:17-01:50
----*LUNCH BREAK*---		
Setting Up Hadoop		2:25-2:50

The first day of the workshop was dedicated to introducing the fundamental concepts of cloud computing to the participants. The agenda included discussions on various aspects of cloud computing, hands-on activities, and practical demonstrations.

Day 1: Introduction to Cloud Computing

Overview

Understanding Cloud Basics:

1. Definition and key concepts of cloud computing.

2. Basic terminologies related to cloud computing.

Overview of cloud architecture.

Cloud Service Models:

1. Explanation of Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS).

2. Advantages and use cases for each service model.

Types of Clouds:

1. Public, private, and hybrid clouds.

2. Pros and cons of each cloud type.

Applications of Cloud Computing:

1. Real-world examples of cloud computing in various industries.

2. Discussion on the benefits of using cloud services for businesses.

Cloud Storage vs. Cloud Computing:

1. Differentiating between cloud storage and cloud computing.

2. Understanding the role of each in the cloud ecosystem.

Hands-On Session

To reinforce the theoretical knowledge gained during the morning sessions, a hands-on session was conducted in the afternoon. During this session, participants learned how to:

Installing the Ubuntu operating system.

Setting up Hadoop, a popular distributed storage and processing framework used in big data applications.

Day 2: Practical Application of Cloud Computing

Overview

The second day of the workshop focused on practical applications of cloud computing, with an emphasis on working with big data using Hadoop.

Workshop Agenda

1.   Working with Big Data:

2.   Introduction to big data concepts.

3.   Explanation of MapReduce programming model.

4.   Overview of Hadoop as a big data processing framework.

5.   Hands-On Activity: Word Count Program

6.   Participants were guided through the process of executing a Word Count program using Hadoop.

7.   Practical experience in processing large datasets.

The workshop concluded with a vote of thanks to the participants and organizers. It was a successful event that provided valuable insights into cloud computing and big data processing. The participants gained a deeper understanding of the cloud ecosystem, its components, and practical applications.

Feedback from the participants was overwhelmingly positive, with many expressing a desire for more advanced workshops in the future. Based on the success of this workshop, the organizers plan to conduct more in-depth sessions on cloud computing, big data, and related technologies in the coming months.

In conclusion, the Cloud Computing Workshop was a valuable educational experience for the final year BSc. students, providing them with essential knowledge and practical skills in cloud computing and big data processing.