Summary Report of Faculty Development Program (FDP) on "Cloud Application Development with Red Hat OpenShift"

Date: September 25, 2023 - September 29, 2023

Host institute: Gurukul Kangri University, Faculty of Engineering & Technology

Introduction:

Department of computer science and engineering, Faculty of engineering and technology, sponsored by IBM and powered by smart interns conducted a comprehensive Faculty Development Program (FDP) from September 25, 2023, to September 29, 2023, focusing on the topic of "Cloud Application Development with Red Hat OpenShift." The FDP aimed to equip participants with essential knowledge and skills to leverage Red Hat OpenShift for cloud-native application development. The speaker of the FDP was Mr. Shivam Shivhare from Smart Internz.

Key Objectives:

The primary objectives of the FDP were as follows:

- 1. To provide an in-depth understanding of cloud computing concepts and their significance in modern application development.
- 2. To introduce participants to Red Hat OpenShift as a leading container orchestration platform.
- 3. To enable participants to design, develop, deploy, and manage cloud-native applications using OpenShift.
- 4. To foster collaboration among participants and promote the sharing of best practices in cloud application development.

Participants:

The FDP saw enthusiastic participation from faculty members, researchers from various academic institutions and organizations. Approximately 40+ participants were joined the workshop.

Program Highlights:

The FDP featured a series of interactive sessions, hands-on workshops, and expert-led discussions. Some of the key highlights included:

- 1. Introduction to Red Hat OpenShift: Participants were introduced to Red Hat OpenShift, its architecture, and its role in container orchestration and Kubernetes management.
- 2. Hands-on Workshops: Practical sessions allowed participants to create, deploy, and manage containerized applications on OpenShift. They gained hands-on experience in using OpenShift tools and resources.
- 3. Security and Compliance: Security considerations in cloud application development were discussed, along with methods to ensure compliance with industry standards.
- 4. Continuous Integration/Continuous Deployment (CI/CD): The FDP covered CI/CD pipelines with OpenShift, automating application delivery and reducing manual intervention.
- 5. Networking and Storage: Networking and storage solutions within the OpenShift ecosystem were explored to enable participants to design robust applications.

Outcomes:

At the conclusion of the FDP, participants gained a comprehensive understanding of cloudnative application development with Red Hat OpenShift. On the 5th day of the FDP, a valedictory ceremony was conducted in the OSH of the CSE department, and certificates were distributed to the delegates by Dr. Vipul Sharma, Dr. Mayank Aggarwal, Dr. Mani Madhukar and Mr. Shivam Shivhare.

Conclusion:

The Faculty Development Program on "Cloud Application Development with Red Hat OpenShift" conducted by Gurukul Kangri University was a resounding success. Participants left the program with the knowledge and skills needed to excel in modern cloud-native application development, positioning them to contribute effectively to their respective institutions and organizations in the era of cloud computing. The FDP's interactive sessions, hands-on workshops, and expert guidance contributed to its effectiveness in achieving its objectives.





