

**Guru Nanak Dev Engineering College, Ludhiana**  
**Department of Computer Science and Engineering**

Report On

Three-days Capacity Enhancement Program for Faculty

**“Hands-on with GitHub and Docker on Linux”**

(July 15<sup>th</sup> -17<sup>th</sup>, 2024)

A three-days Capacity Enhancement Program on “Hands-on with GitHub and Docker on Linux” was held from July 15<sup>th</sup> -17<sup>th</sup>, 2024. The program was coordinated by Dr. Kiran Jyoti HOD(CSE), with Er. Manjot Kaur Gill serving as the co-coordinator. The event saw active participation from 26 faculty members from the CSE and IT departments, who gained significant insights and hands-on experience in working with Unix-based systems, Git, and Docker.

On the first day, Er. Satinderpal Singh, Assistant Professor (CSE), delivered an enlightening talk on the fundamental aspects of Unix-based operating systems. His sessions included topics such as “Understanding and Installation of Unix-based OS”, “Configuring Linux and Understanding BASH Shell” and “Linux Commands and GIT”. These sessions provided the participants with a solid foundation necessary for efficiently working with Unix-based environments as pre-requisites of Docker concepts.

The second day featured Er. Vipin Gupta, a distinguished expert with extensive qualifications, including BE, Redhat Certified Security Specialist (RHCS), Redhat Certified Engineer (RHCE), Certified Ethical Hacker (CEH), Cisco Certified (CCNA), and Microsoft Certified (MCSE, MCSA). Er. Gupta focused on Docker, delivering comprehensive sessions on “Docker Installation, Create and Manage Docker Containers”, “Docker Networking” and “How to Build, Manage, and Store Custom Docker Images, Working with Dockerfile”. His extensive experience and practical insights significantly enhanced the participants understanding of containerization and Docker networking.

Continuing on the third day, Er. Vipin Gupta conducted advanced sessions on “Deploying Applications using Docker Compose” and “Using Docker in AI, Cyber Security, and Data Science”. These sessions provided the participants with advanced knowledge and practical skills necessary for deploying complex applications and leveraging Docker in various specialized fields, such as AI, cybersecurity, and data science.

The program concluded with a vote of thanks by the co-coordinator, Er. Manjot Kaur Gill. The guests were honoured by the coordinator, Dr. Kiran Jyoti, alongside Dr. Parminder Singh and Er. Amanpreet Singh Brar. The concluding ceremony marked the end of a successful and informative program, which greatly enhanced the participants skills and knowledge in GitHub and Docker on Linux.

**Er. Manjot Kaur Gill**  
**Co-coordinator**

**Dr. Kiran Jyoti**  
**Coordinator and HOD(CSE)**