Agenda: 5 Aug 2025

9:00am-1:00pm

- Introduction to Containers and Docker Basics
- What are Containers and Why Use Them?
- Differences Between Virtual Machines and Containers
- Introduction to Docker Architecture
- Docker CLI Basics: Images, Containers, Volumes, and Networks
- Creating and Managing Docker Containers
- Writing and Using Dockerfiles
- Docker Volumes and Persistent Data
- Docker Networking Essentials
- Docker Compose: Multi-Container Applications

Lab

- Deploy a Docker Container

2:00pm – 5:00pm

- Introduction to CI/CD and Popular Tools
- What is Continuous Integration (CI)?
- What is Continuous Delivery/Deployment (CD)?
- Benefits of CI/CD in Modern Software Development
- Overview of CI/CD Tools and Platforms: Jenkins, GitHub Actions
- Typical CI/CD Pipeline Workflow
- DEMO: Using GitHub Actions with GitHub Pages for Deployment
- Continuous Delivery Concepts
- Continuous Deployment Explained

Labs

- Github Pages
- Docker Integration with Github Actions