

## **Week 2 - DevOps Principles And Version Control**

### **Topics :**

- DevOps philosophy, goals, and best practices.
- Key concepts: CI/CD, automation, collaboration.
- Version control with Git (branches, commits, pull requests).
- GitHub/GitLab workflows (forking, merging, pull requests).

### **Assignments:**

- Analyze a real-world case study (e.g., Netflix, Etsy, or Spotify) and map their DevOps practices to key principles.
- Set up a GitHub repository, create multiple branches, and simulate a full development workflow
- Feature branches.
- Pull requests with approvals.
- Conflict resolution during merges.
- Create a detailed documentation file describing your branching strategy.

### **Resources:**

- What is DevOps?: [AWS DevOps Guide](#)
- [Git Handbook by GitHub](#)
- Analyze a real-world case study: [Netflix DevOps Practices](#).
- GitHub workflows tutorial: [GitHub Guides](#)