Learning Guide Unit 8

Overview

Unit 8: Emerging Trends in Software Engineering (DevOps, Continuous Integration, AI in SE)

Topics:

- DevOps Practices and Automation (including Jenkins, GitLab CI, and Travis CI)
- AI-Driven Software Development
- Blockchain Applications in Software Engineering
- Cloud-Native Architectures and Microservices

Learning Outcomes:

By the end of this unit, you will be able to:

1. Describe the key principles of DevOps, Automation, and Continuous Integration using tools like Jenkins, GitLab CI, and Travis CI.
2. Explain the role of AI-driven software development in enhancing productivity.
3. Identify the core components of Blockchain, cloud-native architectures, and microservices.