

DevOps & SDLC Overview

Bootcamp 2025

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What is DevOps?

- Development + Operations
- Cultural philosophy and set of practices
- Aims to unify software development and operations
- Focuses on continuous delivery of value
- Emphasizes automation and monitoring

DevOps Key Principles

- Continuous Integration (CI)
- Continuous Delivery/Deployment (CD)
- Infrastructure as Code (IaC)
- Monitoring and Logging
- Collaboration and Communication

Software Development Life Cycle (SDLC)

- Planning
- Analysis
- Design
- Implementation
- Testing & Integration
- Maintenance

SDLC Models

- Waterfall
- Agile
- Spiral
- V-Model
- DevOps (Modern Integration)

DevOps & SDLC Integration

- Faster delivery cycles
- Improved collaboration
- Automated testing and deployment
- Continuous feedback
- Better quality assurance