DevOps

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Post Graduate Program in DevOps

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DevOps

CI/CD Pipeline with Jenkins

Course Introduction

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In traditional processes. the development team gets involved in preparing Builds manually. This consumes a lot of time and effort.

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Build Automation with Jenkins

With automated Builds, developers can focus on the development work rather than performing manual Builds.
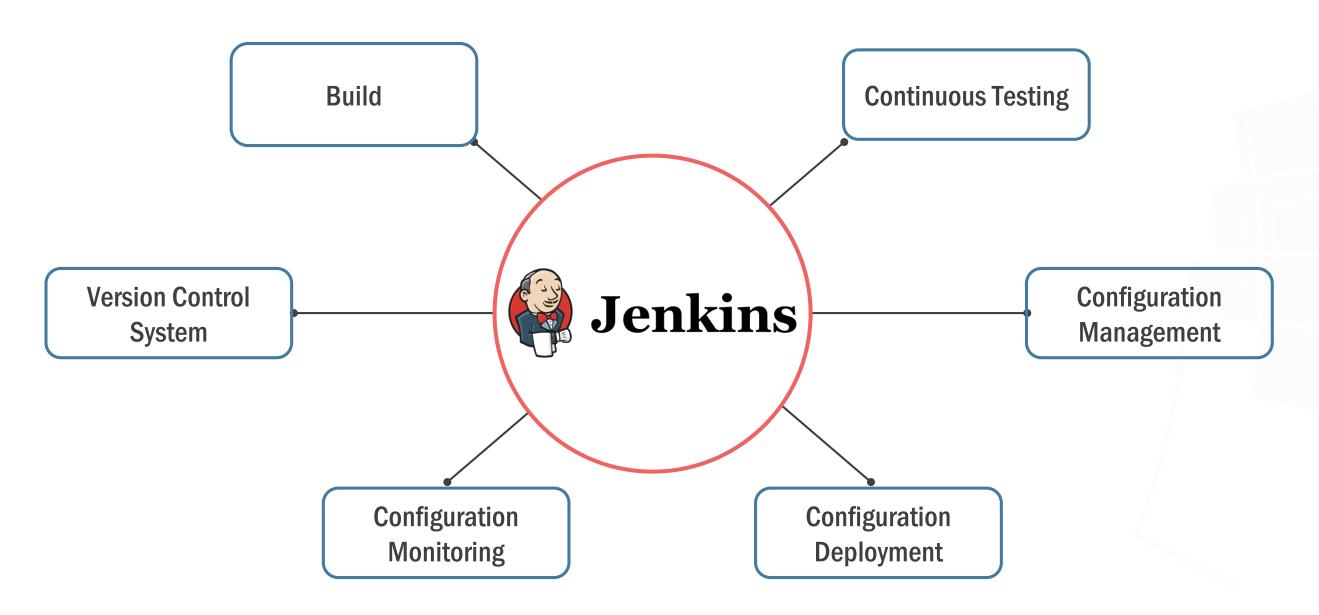
Importance of Jenkins in DevOps

Jenkins helps to build and test software projects continuously. Developers can easily integrate changes into the project.

Build

Continuous Testing

Version Control System

Jenkins

Configuration Management

Configuration Monitoring

Configuration Deployment

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Features of Jenkins

Jenkins offers some powerful developer-centric features including:

CI/CD
Automation

Rapid
Upgrades

Distributed
Builds

Build and Deployment
Automation

Customized
Notifications

Industry Sectors Using Jenkins

Some of the industries that use Jenkins extensively for CI/CD pipeline development are:

Information Technology and Services
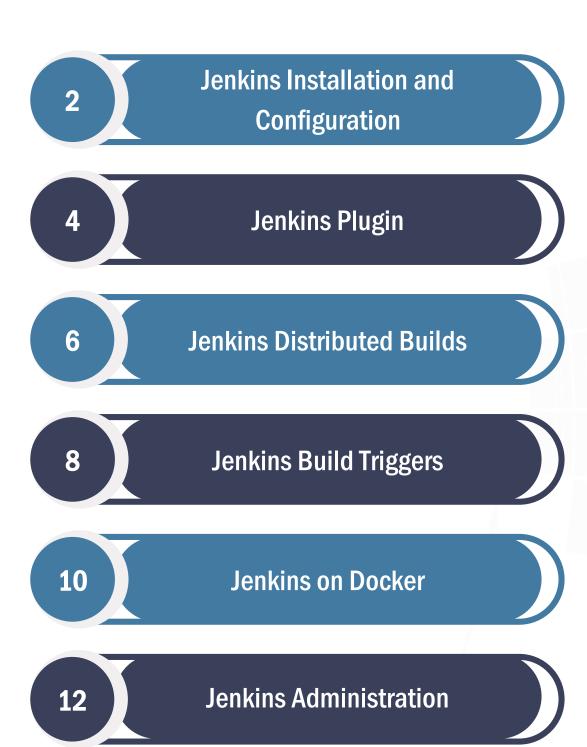
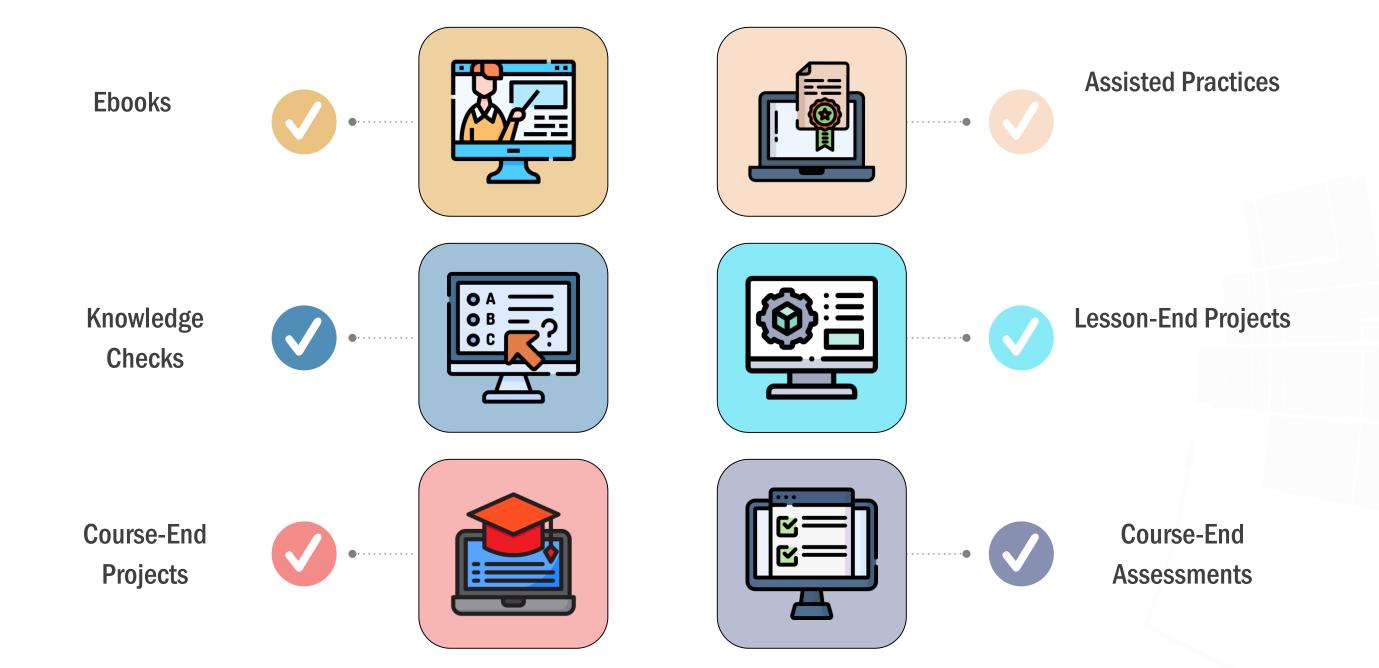Hospital and Healthcare

Financial Services

Insurance

Logistics

Course Outline

1. DevOps Practices and Methodologies
2. Jenkins Installation and Configuration
3. Exploring Jenkins
4. Jenkins Plugin
5. Jenkins Freestyle Job
6. Jenkins Distributed Builds
7. Source Control Management, Build Tools and Test Reports
8. Jenkins Build Triggers
9. Jenkins Pipeline
10. Jenkins on Docker
11. Jenkins Integrations
12. Jenkins Administration

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Course Components

Ebooks ✓ ·········

Knowledge Checks ✓ ·········

Course-End Projects ✓ ·········

········· ✓ Assisted Practices

········· ✓ Lesson-End Projects

········· ✓ Course-End Assessments

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Course Outcomes

Implement Jenkins in the current project that you are working on

Integrate Jenkins with Github to implement Continuous Integration

Work with Code scanning tools to improve code quality

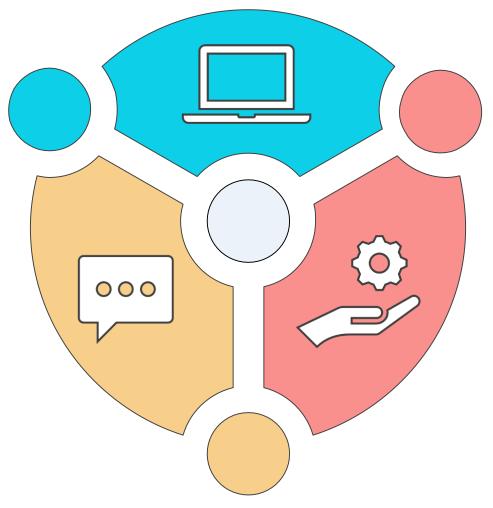Integrate Jenkins with Docker to implement Continuous Deployment

Automate a complete CI/CD pipeline

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Customer Support