




Why Use CI/CD Technologies in UdaPeople Application




What is CI/CD?

- CI/CD stands for continuous integration and continuous delivery or continuous deployment.
 - It is a method to frequently deliver apps to customers by introducing automation into the stages of app development.
 - It is part of DevOps, which helps shorten the software development lifecycle and improve collaboration between developers and operations teams
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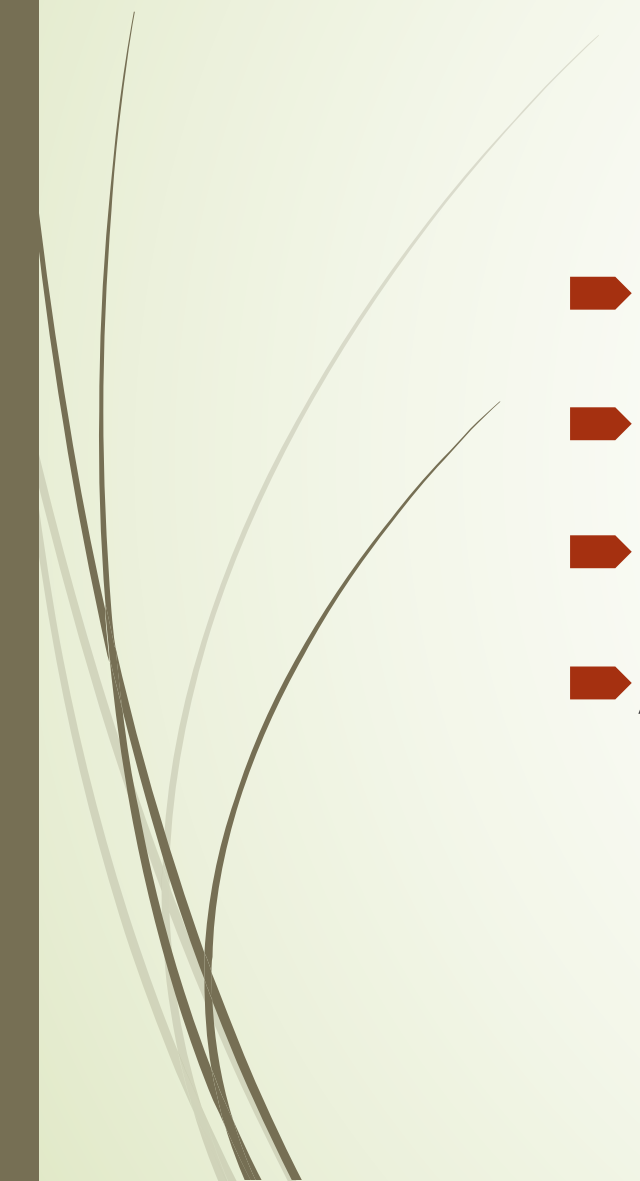


How does CI/CD Work?

- CI/CD consists of three main stages: continuous integration, continuous delivery, and continuous deployment.
 - Continuous integration: Developers merge their code changes with the main code repository for their project. As they push code, they trigger automated builds and tests to ensure that the code is valid and error-free.
 - Continuous delivery: The build is delivered to a runtime environment for integration, quality assurance, or preproduction. Functional and performance tests are run against the application. The code is ready to be deployed to production at any time.
 - Continuous deployment: The code is deployed to production environments automatically or with minimal human intervention. The deployment launches and distributes software to end users.
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Benefits of using CI/CD

- ➡ Increase Revenue
 - ➡ Protect Revenue
 - ➡ Reduce Cost
 - ➡ Avoid Cost
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CI/CD Increase Revenue by:

- Taking your app into competition early by deploying to production without any human interactions
 - Minimize development cost by allowing the team to focus only on developing new features
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CI/CD Protect Revenue by:

- Minimize down time due to deployment issues/bugs
 - Early detect of deployment issues or new app bugs
 - Provide set of tools that help you detect expected failures by monitoring servers status
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CI/CD Reduce Cost by:

- Catch compilation errors early, so prevent code errors early
 - Reduce deploy new feature cost by allowing the developers to focus only on writing code
 - Minimize the rate of deployed software bugs to production by early detection through smoke test
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CI/CD Avoid Cost by:

- Avoid losses due to production bugs by catching unit tests failures
 - Secure your app by implementing automated security checks
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Thank you!