Uda People CI/CD

Continuous integration/continuous delivery

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What is continuous integration?

- Continuous integration (CI) is the process of automating and integrating code changes and updates from many team members during software development. In CI, automated tools confirm that software code is valid and error-free before it's integrated, which helps detect bugs and speed up new releases.

What is continuous delivery?

- Continuous delivery (CD) is the ability to push new software into production multiple times per day, automating the delivery of applications to infrastructure environments. CD is part of DevOps, which helps shorten the software development lifecycle.

How is CI different from CD?

- Continuous delivery is the interim step of a software release pipeline that begins with continuous integration and ends with continuous deployment. The goal of these stages is to make small changes to code continuously, while building, testing, and delivering more often, quickly and efficiently.

Is CI needed before implementing CD?

- Because continuous delivery is a logical next step in the software development pipeline after continuous integration, it makes sense to first have a CI process in place. Once software teams have automated the testing process, they can also automate the release process, followed by rapid deployment.

What are the requirements for CI/CD?

- Software development teams need solid, tested processes for CI/CD, as well as testing solutions that meet the needs of the codebase. Also, teams need automation to deploy solutions so that they can eliminate the need for time-consuming manual deployment.

Stages of the CI/CD pipeline

- Continuous integration
- Continuous delivery
- Continuous deployment

Benefits of CI/CD

- More frequent code deployments
- Working seamlessly with many environments
- Drives regression testing
- Improved project collaboration and quality
- Better adoption
- Better user experience
- Reduced development costs
- More secure applications
- Higher productivity
- Accelerates scaling
- Generates feedback

The business impact of CI/CD

- Revenue increases because of the faster TTM
- Less human errors because of the predictably
- Avoid Business outages because of being recoverable
- Down-time reduce because of the smoke test
- Fewer Product Bugs bugs because of the integration testing

Thank you

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