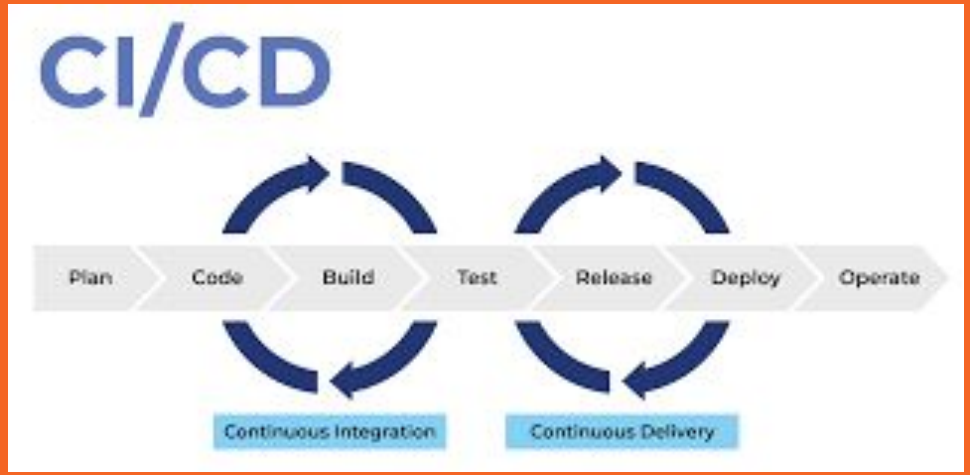
WHY CI/CD ?



Continuous Integration / Continuous Delivery

CI

Continuous integration

Continuous integration is a coding philosophy and set of practices that drive development teams to frequently implement small code changes and check them in to a version control repository. Having a consistent integration process encourages developers to commit code changes more frequently, which leads to better collaboration and code quality.

CD

Continuous delivery

Continuous delivery picks up where continuous integration ends, and automates application delivery to selected environments, including production, development, and testing environments. Continuous delivery is an automated way to push code changes to these environments.

Benefits of CI/CD

- **Faster time to market** The primary goal of a CI/CD pipeline is to deliver working software to users quickly and frequently.
- **Better code quality** Testing your code's behavior is an essential step in the software release process but doing it thoroughly can also be extremely time consuming.
- **Cost-effectiveness** In any business situation, time and assets are essential. With automated testing hooks at every stage, developers can fix issues early and avoid critical issues in the production environment.

Conclusion

The benefits of an automated CI/CD pipeline range from practical considerations like code quality and rapid bug fixes, to ensuring you're building the right thing for your users and improving your entire software development process.

Despite the name DevOps suggesting a focus on developer and operations teams, building a CI/CD pipeline provides an opportunity for collaboration across a whole range of functions. By streamlining the steps to release your product, you provide your team with more insights into how your product is used and free up individuals' time so they can focus on innovation.