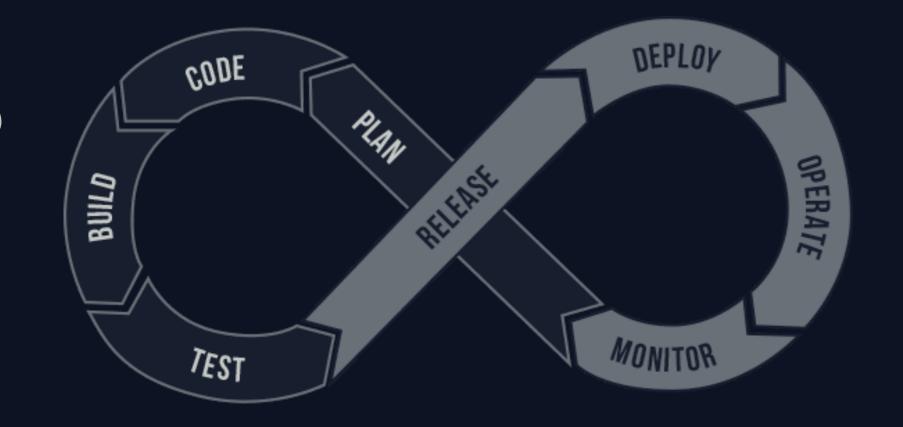
What is CI/CD?

And why do we need it?



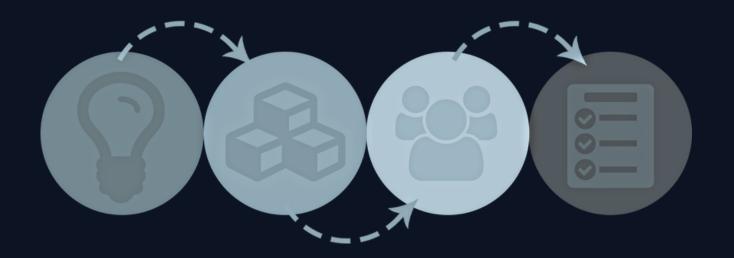
Presentation by Mostafa Ibrahim



CI/CD

They are software development/delivery practices that when they are used together,

leads to a much more productive, faster, healthier process of producing software





CI

(Continuous Integration)

Continuous Integration is the practice where the developers frequently merge (integrate) their code changes into a central repository.

And automating the process of making sure that nothing was broken due to these code changes and passing all the tests and checks.







CD

(Continuous Delivery and/or Continuous Deployment)

CD is the next step after CI.

Continuous Delivery is a practice that aims to keep the code in a deployable state (an artifact deployable to production), It allows us to wait before deploying each new release to evaluate the change, so it will always need human intervention to "push the button".













CD

(Continuous Delivery and/or Continuous Deployment)

Continuous Deployment goes one step further than continuous delivery.

It is a practice that doesn't require human intervention, every change that passes all the stages is released (deployed) to users.

The only thing that will prevent a change from being deployed is a failed test.











CI/CD Benefits



 Faster delivery of features to users (tested and checked)



- Faster feedback loop
- Increases user satisfaction



- Frequent delivery of value
- Faster revenue collection





- Reducing development costs
- Reducing bugs in all stages



 More engineers are working on the software instead of maintenance



• Improves overall code quality



THANK YOU!