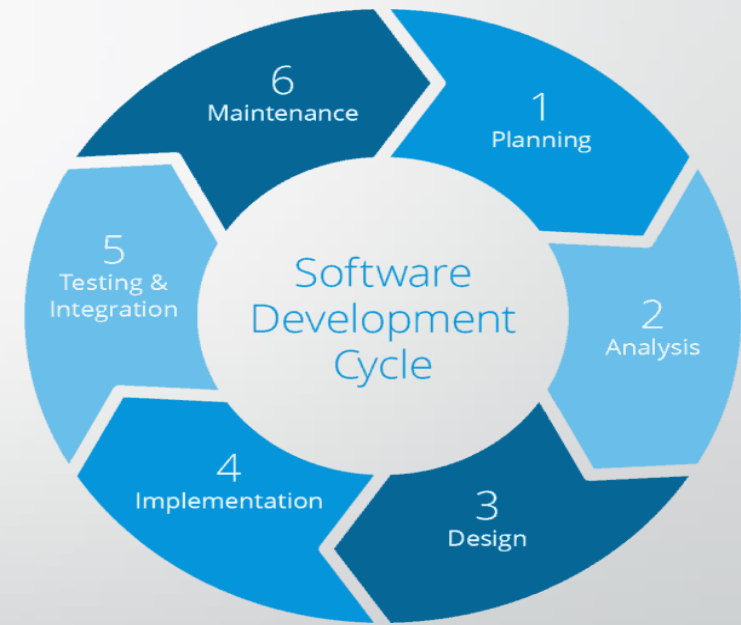# What is CI/CD?

presentation

Contents:

- Concept, definition and what does it mean.

- Benefits and advantages

- Why it's important

- Cost

- Stacks

What is CI/CD ?

- CI/CD stands for continuous integration / continuous deployment.

- It refers to the software development lifecycle in DevOps(development-Operations)

- CI : A development practice that require developers to integrate into a shared repository. The code gets verified by an automated build to detect any up coming problems early on.

- CD : Is the automation of delivery of the completed code.

Benefits

- **Happier customers:** *Fewer bugs and errors make it into production, so your users and customers have a better experience. This leads to improved levels of customer satisfaction, confidence and reputation.*

- **Hit dates more reliably:** *Removing deployment bottlenecks and making deployments predictable can remove a lot of the uncertainty around hitting key dates. Breaking work into smaller, manageable bites means it's easier to complete each stage on time and track progress.*

- **Free up developers' time:** *With more of the deployment process automated, the team has time for more rewarding projects. It's estimated that developers spend between 35% and 50% of their time testing, validating and debugging code.*

- **Less fire fighting:** *Testing code more often, in smaller batches, and earlier in the development cycle can seriously cut down on fire drills.*

Why is it important

- *CI/CD is important because it helps Dev and Ops professionals work as efficiently and effectively as possible. It decreases tedious and time-consuming manual development work and legacy approval processes, freeing DevOps teams to be more innovative in their software development. Automation makes processes predictable and repeatable so that there is less opportunity for error from human intervention. DevOps teams gain faster feedback and can integrate smaller changes frequently to reduce the risk of build-breaking changes. Making DevOps processes continuous and iterative speeds software development lifecycles so organizations can ship more features that customers love.*

Technology stack for CI/CD