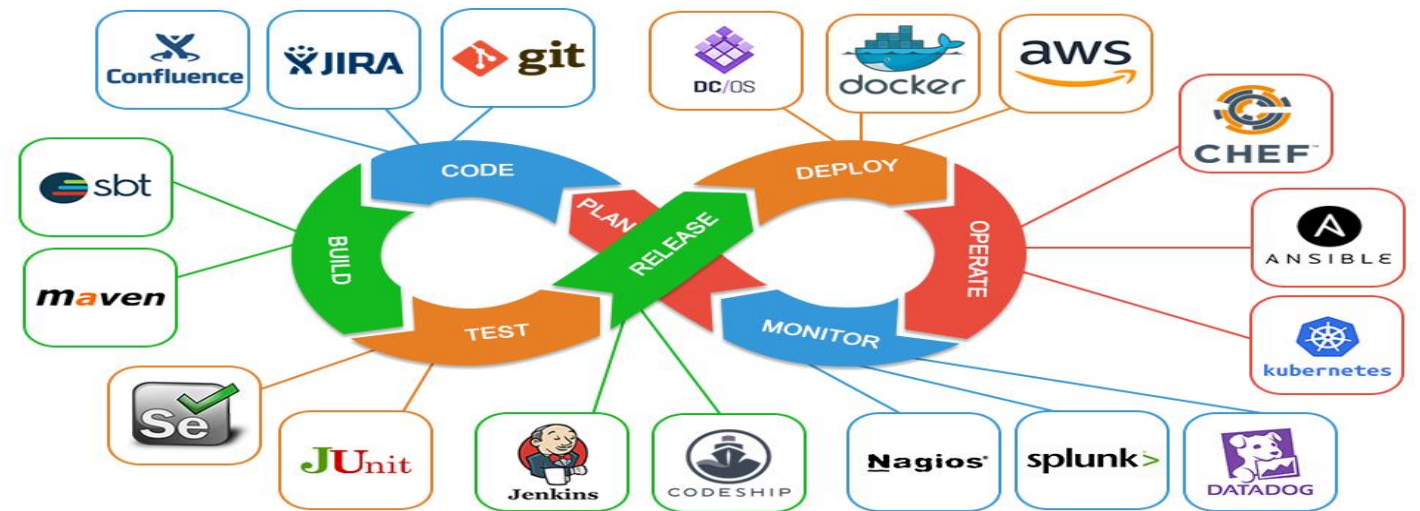


DEVOPS



AGENDA

- What is DevOps ?
- Advantages of DevOps.
- DevOps tools.

WHAT IS DEVOPS ?

- DevOps is a software development and application delivery method that takes a collaborative and integrated approach between application development (the Dev) and application operations (the Ops). The goal of DevOps is to deliver applications faster, at an increased frequency and with a lower failure rate.

BENEFITS OF DEVOPS.

- Technical benefits.
- Cultural benefits.
- Business benefits.

TECHNICAL BENEFITS

- Continuous software delivery.
- Less complexity to manage and scale.
- Faster resolution of problems.
- Increase the speed of software lifecycle.

CULTURAL BENEFITS

- Happier and more productive teams.
- Higher employee engagement.
- Greater professional development opportunities.

BUSINESS BENEFITS

- Faster delivery of feature.
- More stable operating environments.
- Improved communication and collaboration.
- More time to innovate rather than fix and maintain.

DEVOPS TOOLS



CONTAINERIZATION

- Containerization involves bundling an application together with all of its related configuration files, libraries and dependencies required for it to run in an efficient and bug-free way across different computing environments.



CONTAINER ORCHESTRATION

- Container orchestration automates the deployment, management, scaling, and networking of containers.
- Enterprises that need to deploy and manage hundreds or thousands of containers and hosts can benefit from container orchestration.
- Container orchestration can be used in any environment where you use containers. It can help you to deploy the same application across different environments without needing to redesign it.



kubernetes

INFRASTRUCTURE AS CODE

- Infrastructure as code (IaC) is the process of provisioning and managing your cloud resources by writing a template file that is both human readable, and machine consumable.



CONFIGURATION MANAGEMENT

- configuration management (CM) refers to the process of systematically handling changes to a system in a way that it maintains integrity over time.
- There are a number of configuration management tools available in the market.,Ansible, Puppet and Chef are popular choices.



CI/CD

- CI/CD is a method to frequently deliver apps to customers by introducing automation into the stages of app development.
- The main concepts attributed to CI/CD are continuous integration, continuous delivery, and continuous deployment.
- There are a number of CI/CD tools available in the market., Jenkins and CircleCI are popular choices.



Any Question ?



Thanks !

