



CICD



# CICD Definition:

- Purpose of CICD is to automate the process of integration and deployment to have a robust process that can run without any interference from the developers , so we can save time and cost.
- Aims to focus more on development instead of operations , so we detect issues early and take a great actions based on the alerts.



# CICD Stages:

- Build & Integration testing : build source code from different developers and check the integrations issues.
- Static analysis : run code smells checks against the rules defined to measure code quality
- Unit testing : execute the unit testing so we can detect the issues early and measure code coverage.
- Deploy : deploy our application to cloud environments or local environments so we can run smoke testing
- Smoke testing : test the deployed versions so we can take action weather to promote or destroy and revert to the old instance



# CICD benefits :

- Save developers time and cost so they focus on code quality only.
- By doing continuous integration , no need for any manual interrupts to validate the code changes from developers so we save development cost and working on the next releases faster.
- Deliver the features needed for business faster.
- By doing continuous deployment we save much time and boost the deployment delivery for customers.
- Detect issues early so they can fix it.
- Perfectly save business applications by detecting issues early and take actions so the business continue running and no down time so we maintain the revenue.
- By detecting issues early and get the working version to the production , the customers will not be affected and face issues.