




# CI/CD Benefits

# Continuous Integration (CI):



- ❑ CI is the practice of automating the integration of code changes from different developers into same repository.
- ❑ the key benefits of integrating regularly is that you can detect errors quickly and locate them more easily “fail fast”.
- ❑ CI handles everything that is related to the code itself, building artifacts, testing, analysing, creating artifacts.

# Continuous Deployment (CD):

- ❑ **CD is a software engineering practice in which team delivers value frequently using an automated deployments.**
- ❑ **CD deals with everything related to deployment, creating infrastructure, configuration of servers, deploying artifacts, smoke testing, going to production, rollbacks, etc.**

# Continuous Delivery:

- ❑ **Continuous delivery is an engineering practice in which teams produce and release value in short cycles.**
- ❑ **Continuous delivery contains and enhances the processes of Continuous Integration & Continuous Deployment to help delivering the needed value in short time with minimum Errors.**

# CI/CD Benefits

- ❑ **Detect compiling errors quickly:** will help in reducing cost by reducing the time a developer might take to trace the errors in new code of other developers
- ❑ **Detect the unit test failures:** will avoid cost by providing a trusted product to customers with less bugs and reduce time compared if it will be done from testing team.
- ❑ **Detect vulnerability:** will help us to reduce the cost that we might face from customer due to security issues.

# CI/CD Benefits

- ❑ **Automate Deployment to Prod: will increase revenue as it will take less time to be available to market.**
- ❑ **Automate Smoke testing: will protect revenue as it will reduce the downtime in case facing any major bug or crash.**
- ❑ **Automate Rollbacks: will protect revenue as it will help in reverting changes back and bring the application to the initial working state.**