CI/CD benefits

UDAPeople

Agenda

- CI/CD Definition
- Benefits of CI/CD
- QA

CI/CD Definition.

 CI/CD In software engineering, CI/CD or CICD is the combined practices of continuous integration and continuous delivery or continuous deployment

CI/CD Definition Cont.

Continuous Integration

- The practice of merging all developers' working copies to a shared mainline several times a day.
- Continuous Deployment
 - A software engineering approach in which the value is delivered frequently through automated deployments.
- Continuous Delivery
 - An engineering practice in which teams produce and release value in short cycles.

Benefits of CI/CD

- Automatically catch compile error
 - When code added to the code base the CI/CD pipeline automatically build and if the new code fails the pipeline notify the team which leads to Reduce cost from business prespective
- Automatically run tests
 - When the new code pushed the codebase the CI/CD automatically run the tests to the code, which means that the run time error can be detected earlier and this avoid costs by avoiding bugs on production

Benefits of CI/CD Cont.

- Automatically infrastructure creation
 - When we move from one environment to another "dev, test, preprod, prod" you do not need to do every step from beginning which leads to avoid cost as well as less human error and faster deployment
- Automatically infrastructure cleanup
 - Cleaning up the resources automatically rather than manual which leads to less infrastructure cost from the unused resources.
- Automated rollback triggered by job failure
 - When the production deployment fails quick undo to return back to the production to the working state which protect the revenue.

QA