## CI/CD

- What is the cloud?
- What is CI/CD?
- Benefits of CI/CD on Cloud?

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#### What is the cloud?

- Amazon Web Services (AWS) is the world's most comprehensive and broadly adopted cloud platform, offering over 175 fully featured services from data centers globally.
- Benefits of using AWS is we avoid the headache of maintains the data center
- Also we can pay as we go and we can scale out or shrink easly
- We pay only for servers or services which we need

### What is CI/CD?

- Continuous integration (CI) and continuous delivery (CD) embody a culture, set of operating principles, and collection of practices that enable application development teams to deliver code changes more frequently and reliably.
- Continuous integration and continuous delivery require continuous testing because the objective is to deliver quality applications and code to users

#### Benefits of CI/CD on Cloud

- Smaller code changes are simpler (more atomic) and have fewer unintended consequences.
- Fault isolation is simpler and quicker.
- Mean time to resolution (MTTR) is shorter because of the smaller code changes and quicker fault isolation.
- Testability improves due to smaller, specific changes.
  These smaller changes allow more accurate positive and negative tests.

#### Benefits of CI/CD on Cloud

- Elapsed time to detect and correct production escapes is shorter with a faster rate of release.
- The backlog of non-critical defects is lower because defects are often fixed before other feature pressures arise.
- The product improves rapidly through fast feature introduction and fast turn-around on feature changes.
- Upgrades introduce smaller units of change and are less disruptive.

#### Benefits of CI/CD on Cloud

- CI-CD product feature velocity is high. The high velocity improves the time spent investigating and patching defects.
- Feature toggles and blue-green deploys enable seamless, targeted introduction of new production features.
- You can introduce critical changes during non-critical (regional) hours. This non-critical hour change introduction limits the potential impact of a deployment problem.
- Release cycles are shorter with targeted releases and this blocks fewer features that aren't ready for release.

# Thanks

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