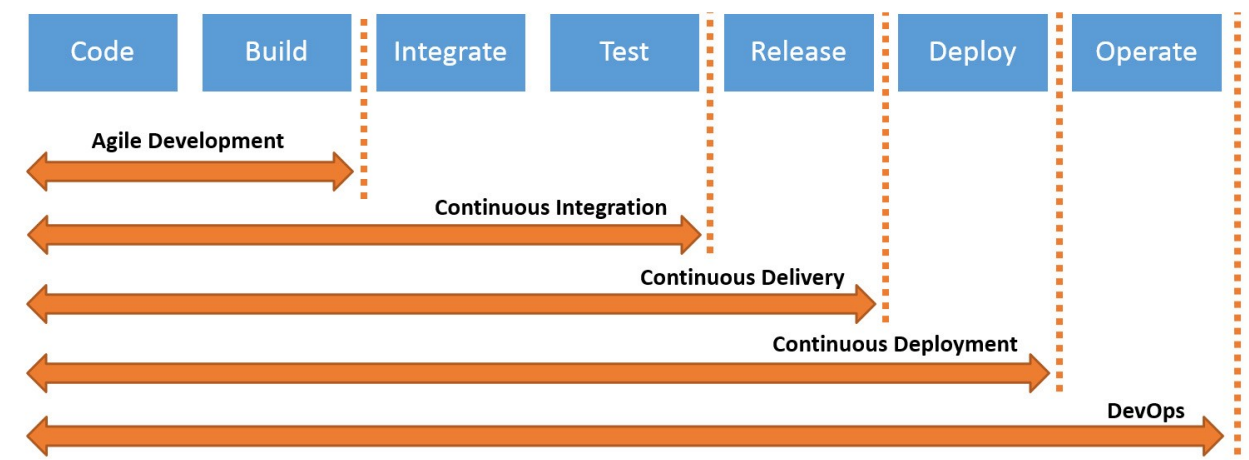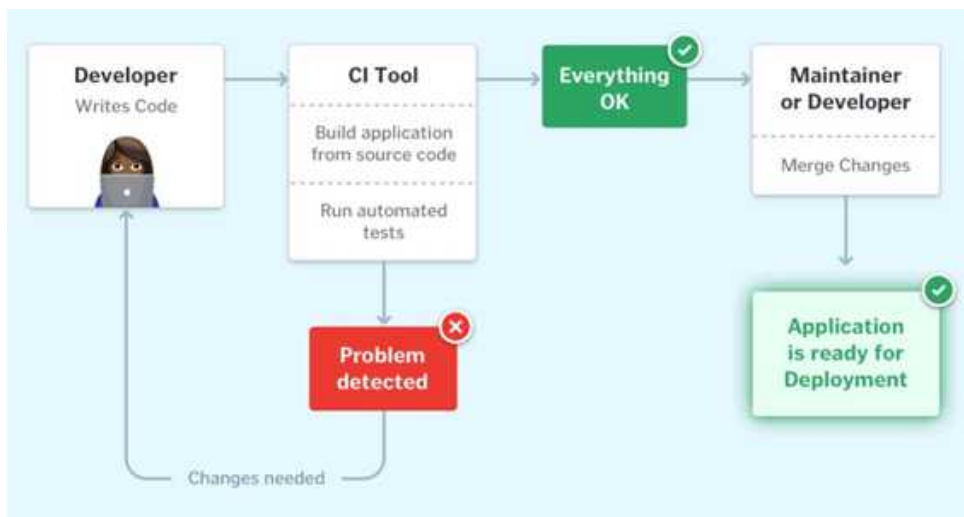# UDAPEOPLE

CI/CD BENEFITS PROPOSAL

WHAT DOES CI/CD? CONCEPTS EXPLAINED BELOW:

▸ CI/CD consist of three major concepts

o **Continuous Integration**

Continuous Integration describes the process of merging developer branches to the main branch several times a day. Each merge triggers an automated code build and test sequence, which ideally runs in less than 10 minutes.
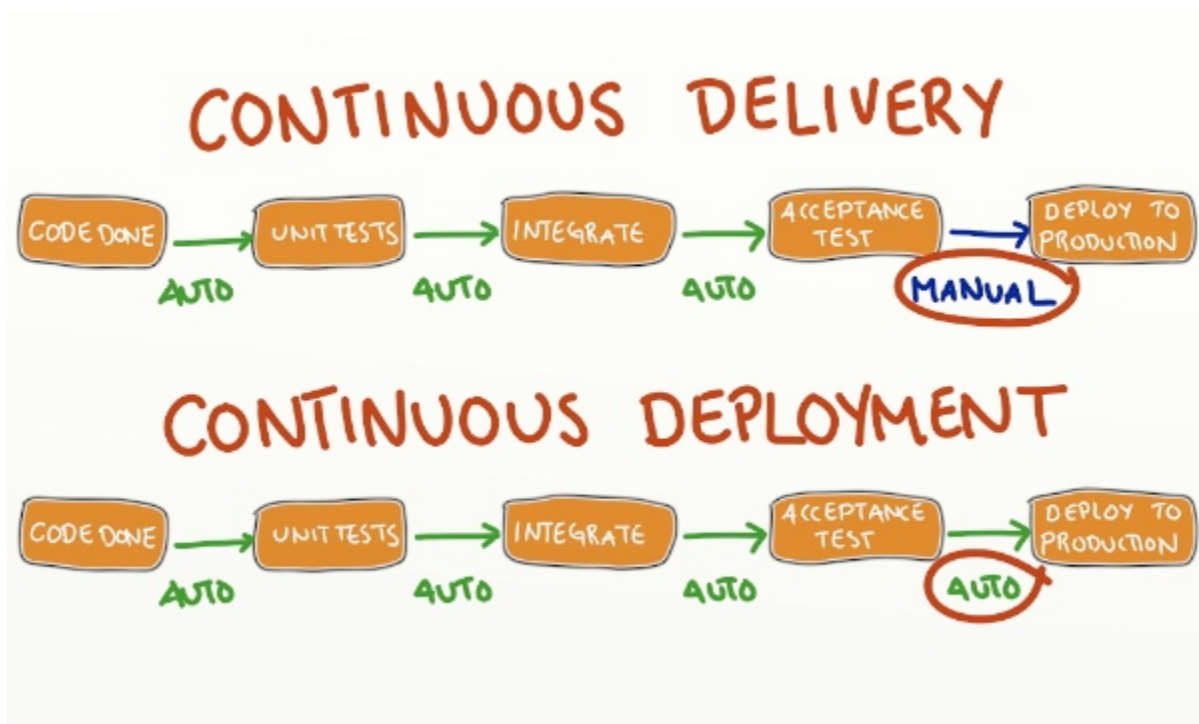
- Catch Compile errors After Merge.

o **Continuous Delivery**

In addition to Continuous Integration, Continuous Delivery makes sure that changes of a software product can be released quickly to customers in an automated way and at any point in time.

▶ Continuous Deployment: -

      Continuous Deployment extends Continuous Delivery in such a way that it allows frequent automated deployments without any human interaction. Typical phases in Continuous Deployment are Infrastructure Provisioning, Smoke Testing, Production Deployments and and automated Rollbacks.

WHAT ARE OUR CURRENT PAIN POINTS?

- ➢ Proceesing software delivery manually. Due to this delivery taking a day some times.
- ➢ Deploying code manually takes time and issues due to the check or config missed.
- ➢ Our manual release process is error-prone and always leads to delays of production deployments
- ➢ Releases for every 4 months.
- ➢ We get late feedback from the business department which prevents us from creating flexible solutions.

Benfits of CICD:-

- CI/CD allows organizations to ship software quickly and efficiently
- Higher Effeciency of web development.
- Faster Product Delivery
- Easier Rollback of Code Changes.
- Fastest Deployment and Noity of Build outcome.
- Cost reduction due to less human errors and faster deployments
- Reduce complexity and safe manual troubleshooting time.
- Automated Smoke Tests and Rollbacks will protect project revenue due to reduced downtimes
- from deploy-related crashes and fast and automated rebuilding of production ready state
- weekly Releases.
- Faster Feedback from Business.