# THE CONCEPT OF CI/CD AND ITS BENEFIT TO UDAPEOPLE

Fundamentals and benefit of CI/CD to help foster automated integrations and delivery

# Fundamentals of CI/CD

### **Continuous Integration**

The practice of merging all developers' working copies to a shared mainline several times a day. It's the process of "Making". Everything related to the code fits here, and it all culminates in the ultimate goal of CI: a high quality, deployable artifact! Some common CI-related phases might include:

- Compile
- Unit Test
- Static Analysis
- Dependency vulnerability testing
- Store artifact

## Fundamentals of CI/CD

### **Continuous Deployment**

A software engineering approach in which the value is delivered frequently through automated deployments. Everything related to deploying the artifact fits here. It's the process of "Moving" the artifact from the shelf to the spotlight. Some common CD-related phases might include:

- Creating infrastructure
- Provisioning servers
- Copying files
- Promoting to production
- Smoke Testing (aka Verify)
- Rollbacks

## **Benefits of CI/CD**

Less developer time on issues from new developer code - Reduce Cost

Less bugs in production and less time in testing - Avoid Cost

Prevent embarrassing or costly security holes - Avoid Cost

Less human error, Faster deployments - Avoid Cost

Less infrastructure costs from unused resources - Reduce Cost

New value-generating features released more quickly - Increase Revenue

# THANK YOU FOR LISTENING