



# CI/CD ADOPTION FOR UDAPEOPLE PROJECT

ACHIEVE, BUILD AND DEPLOY AUTOMATION

# FUNDAMENTALS OF CI/CD

## ▶ **Continuous Integration**

This is a practice where developers integrate code into a central repository regularly. Each code check-in is verified by an automatic build, enabling teams to identify errors quickly.

## ▶ **Continuous Delivery**

With continuous Delivery, quality products are released frequently in an automated fashion.

## ▶ **Continuous Deployment**

Continuous deployment goes a step further than continuous delivery as it allows frequent automated deployments without any human intervention.

# CI/CD Benefits

- ▶ With CI/CD, you can test and deploy code more frequently, giving testers the ability to detect issues early and fix them promptly.
- ▶ Quick and easy rollback of code changes if there are any issues after a release in the production.
- ▶ With a seamless CI/CD pipeline, teams can build, test, and deliver features automatically with minimal manual intervention.
- ▶ It provides an automated infrastructure cleanup which reduces cost from unused resources.
- ▶ Automated smoke test which reduces downtime from a major bug or deploy related crash issue

## Tools used for this project:

- ▶ Cloud Provider: AWS
- ▶ Cloud Integration Pipeline: Circle CI
- ▶ IT Automation: Ansible
- ▶ Analytics and Metrics: Prometheus

# THANK YOU