### **CICD**

Automating Deployment Process

Continuous integration (CI) and Continuous deployment (CD) are a set of principles and collection of practices that enable application development teams to new code changes more frequently and reliably

# Continuous Integration

Continuous integration (CI) is the practice of automating the integration of code changes from multiple contributors into a single software project. Cl is a primary practice allowing developers to frequently merge code changes into a central repository where builds and tests then run.

# Continuous Deployment

Continuous Deployment is a strategy for software releases wherein any code commit that passes the automated testing phase is automatically released into the production environment, making changes that are visible to the software's users.

### Benefits of CI/CD

#### **Faster Release Rate**

Failures are detected faster and as such, can be repaired faster. This

#### **Reduced Cost**

Automation in the CI/CD pipeline reduces the number of errors that can take place in the many repetitive steps of CI and CD. Doing so also frees up developer time that could be spent on product development.

## Benefits of CI/CD contd.

#### **Higher Customer Satisfaction Rate**

The advantages of CI/CD do not only fall into the technical aspect but also in an organization scope. Customers want to know that they are being heard. Adding new features and changes into the CI/CD pipeline based on the way customers use the product will help retain users and gain new ones.

#### <u>Faster Mean Time to Resolution</u>

This helps track the amount of time spent to recover from a failure