

# CI/CD why we should use

UDACITY PROJECT – HUONGNX2

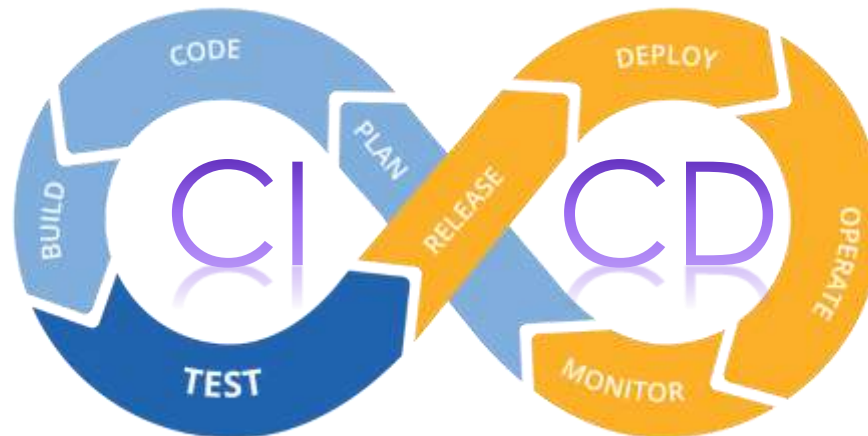
# What is CI/CD

## Continuous Integration (CI)

- The practice of merging all developer's working copies to a shared mainline several times a day

## Continuous Deployment (CD)

- A software engineering approach in which the value is delivered frequently through automated deployments



# The Benefits of CI/CD

## Faster time to market

- ▶ Your productivity and speed increase if you have an automated system. In the same way, CI/CD pipelines enable organizations to deliver software updates and feature more quickly, allowing them to respond to customer needs and market demands faster.

## Higher Quality

- ▶ By catching and fixing issues early in the development process, organizations can ensure that the software they deliver is of high quality and meets the needs of their customers.

# The Benefits of CI/CD

## Greater Efficiency

- ▶ By automating the building, testing, and Deployment of software, organizations can reduce the time and resources needed to deliver software updates and features.

## Lower Costs

- ▶ By catching and fixing issues early in the development process, organizations can reduce the costs associated with fixing issues later in the development cycle.

# CI/CD pipelines real-life example

- ▶ Netflix and Facebook are the prime examples that have successfully implemented CI/CD pipelines to deliver software updates and features quickly and with high quality. Netflix uses a custom-built platform called Spinnaker to manage its CI/CD pipelines.

