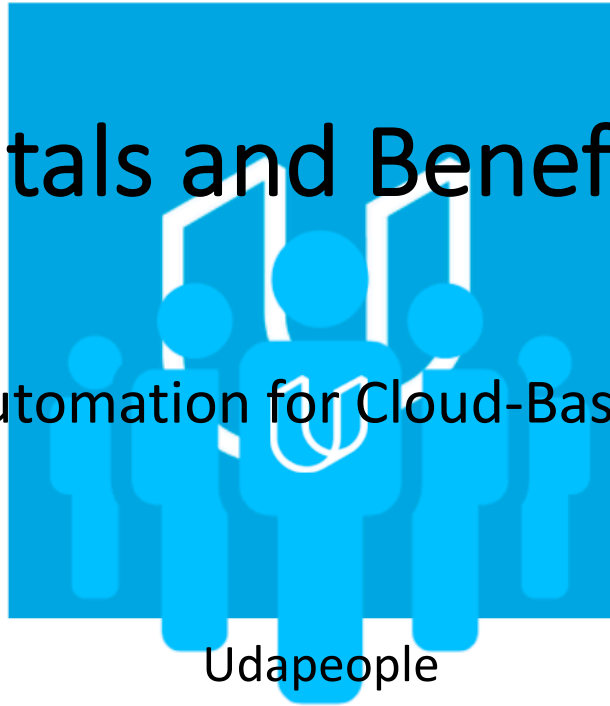


# Fundamentals and Benefits of CI/CD

Build, and Deploy Automation for Cloud-Based Software Products



Udapeople

# Business Benefits of CI/CD

- CI/CD is process which enable software development teams to continuously deploy software updates into production to speed up release rates, reduce costs, and eliminate risks throughout the development life cycle.
- developers can spend more time on building high-quality apps that speak directly to customers' needs/expectations, deliver solutions to market faster, avoid service interruptions, etc.
- CI/CD also makes it easier to deliver high-quality products to market faster and respond to feedback as it comes in, organizations stand to see an increase in profits.

# Bring Products to Market Faster

- Organizations that have effectively implemented CI/CD can bring new products and features to market faster and immediately start generating revenue from the features they deploy
- Back-to-back releases are easier and less time-consuming, and, if something isn't working, they can pull features with a single click.

# Increase DevOps efficiency

- CI/CD automation can eliminate manual tasks, prevent coding errors, detect problems before deployment, allowing teams to work faster without compromising quality. Because it takes less time for development teams to find and fix problems during the production process, CI/CD can dramatically accelerate release rates. What's more, organizations can support recurring releases if code is developed in an automated testing pipeline.

# Improves Application Quality

- CI/CD automation allows developers to deploy code more frequently and make incremental improvements to the code. Teams can automate regression testing and parallel tests, which improves test coverage and ensures that the code is bug-free and works across multiple environments.
- As a result, this process stands to dramatically reduce the likelihood that any bugs or errors slip through the cracks and cause problems down the line. Done right, this practice can lower development costs by eliminating many of the costs incurred while building and testing code changes.