

Benefits of CI/CD to Achieve, Build, and Deploy Automation for Cloud-Based Software Products

What is CI/CD Stand for ?

- ➤ Continuous integration (CI) :
- That helps developers merge their code changes back to a shared branch, or "trunk," more frequently—sometimes even daily.
- Continuous Delivery (CD) :
- the ability to get changes of all types—including new features, configuration changes, bug fixes and experiments into production *safely* and *quickly* in a *sustainable* way
- Continuous Deployment (CD) :
- The final stage in the pipeline that refers to the automatic releasing of any developer changes from the repository to the production.

Benefits of CI/CD to our App 1/2

<u>Automated Smoke Tests (that WIII Protect our Revenue) : </u>
☐ By reducing downtime caused by deploy-related crash or bugs
Automate Infrastructure Cleanup (that will Reduce Cost)
☐ By reducing infrastructure costs from unused resources
Automate Infrastructure Creation (that will Avoid Cost):
☐By Less human error, Faster deployments.
Detect Security Vulnerabilities (that will Avoid Cost):
By Prevent embarrassing or costly security holes

Benefits of CI/CD to our App 2/2

<u>Deploy to Production Without Manual Check:</u>

Less time to market would help us to increase our revenue.

<u>Automated Rollback Triggered by Job Failure:</u>

☐ That will Protect Revenue by help us to Quick undo to return production to working state

Catch Unit Test Failures:

 Having less bug in our live app and spending less time doing manual testing would help us to avoid cost