



# **PRESENTATION**

ON

# **Fundamental and Benefit of CI/CD**

BY

**ONUMAJURU ONYEKACHI KELVIN**

# OUTLINE

- INTRODUCTION
- FUNDAMENTALS OF CI/CD
- BENEFITS OF CI/CD

# INTRODUCTION

- **What is CI/CD?**
- Continuous integration and continuous deployment (CI/CD) is a set of ideas, concepts, processes etc. that enables software changes to be delivered to users in a timely, repeatable, and secure manner by introducing automation into software development processes.
- Continuous integration (CI): is a practice of merging all developers working copies to a shared mainline or into a central repository where automated builds and tests run.
- In CI, codes are build, compile, tested, analyze statically, dependency vulnerability testing and stored.
- Continuous deployment (CD): is a software engineering approach in which the artifact (codes) or value generated through CI is delivered frequently through automated deployments.
- CD involves ; creating infrastructure, provisioning servers, copying files, promoting to production, smoke testing or verification and rollbacks.



# FUNDAMENTAL OF CI/CD

- CI/CD refers to a pipeline where you can submit new code on one end, in order to get it tested through phases such as sourcing, building, staging, production and then release it as ready for production code.

# BENEFITS OF CI/CD

- **HIGH CODE QUALITY:**
- CI/CD offers the ability for code to be tested thoroughly and released in smaller batches. For example, an automated unit test can detect and fix bug issues immediately before the product gets to live stage
- **TIME TO MARKET:**
- Implementing CI/CD , our product (software) can be built and delivered quicker to the market on time because changes done on code are minimal. This will improve organizational flexibility and the ability to meet up with market demand. This also will increase revenue because more product release to market faster, more sales, more profits
- **CUSTOMER SATISFACTION:**
- The ultimate goal of any business is to satisfy the customer and to make profit. CI/CD can guarantee this. Substandard product can ruin one's company reputation. With CI/CD , fast and frequent product are released, bugs are fixed promptly and immediate reaction to feedback are achievable.



Thank you