

# **APPLIED CLOUD AND DEVOPS**

**By Owoicho Emmanuel**

# **Slide 1: Introduction**

- **Title: Me**

## **Slide 2: NVIT**

- **Name of Institution: NVIT**
- **Overview of NVIT's mission and focus**
- **Mention any relevant achievements or specializations**

## **Slide 3: Your Background**

- **Your discipline in school**
- **Any notable achievements or experiences**
- **Faith or relevant personal information for context**

## **Slide 4: Why DevOps?**

- **Explanation of why you chose DevOps**
- **Any specific interests or experiences that led you to this field**

## **Slide 5: Expectations and Goals**

- **Your expectations from working in DevOps**
- **What you hope to achieve in this field**

## **Slide 11: Introduction to Cloud**

- **Definition and importance of cloud computing**
- **Types of Cloud Service Providers (AWS, Azure, Google Cloud, etc.)**

## **Slide 12: Personal Research**

- **Emphasize the importance of effective research skills**
- **Mention tools/platforms used for research (Google, StackOverflow, ChatGPT)**



## **Slide 13: Cautions on AI**

- **Highlight the role of AI in research**
- **Caution on not relying excessively on AI**
- **Emphasize the irreplaceable role of human decision-making**

# **Slide 1: Introduction To DevOps**

- **Title: DevOps Overview**
- **Subtitle: Bridging the Gap between Development and Operations**

## **Slide 2: Development Team**

- **Produces code for various applications (web, mobile, desktop).**
- **Dependencies and software versions specific to their environment.**

## **Slide 3: Operations Team**

- **Ensures application functionality, security, and adherence to specs.**
- **Uses tools for deployment, monitoring, and maintenance.**

## **Slide 4: Challenges**

- **Different environments lead to compatibility issues.**
- **Blame-shifting and lack of collaboration cause delays.**

## **Slide 5: DevOps as a Solution**

- **Cultural and technical approach.**
- **Collaboration, automation, and CI/CD practices.**

## **Slide 6: Key DevOps Concepts**

- **Culture, Automation, CI/CD.**

## **Slide 7: Automation**

- **Reducing manual errors.**
- **Speeding up processes.**



## **Slide 8: CI/CD**

- **Frequent, reliable code releases.**
- **Reduced deployment times.**

## **Slide 9: Operating System**

- **Preferred: Linux for stability and open-source nature.**

## **Slide 10: Version Control**

- **Git and GitHub for version control.**

## **Slide 11: Containerization**

- **Docker for packaging applications.**

## **Slide 12: Container Orchestration**

- **Kubernetes for managing containers.**

## **Slide 13: Automation/CI Tools**

- **Jenkins for deployment automation.**

## **Slide 14: IaC (Infrastructure as Code)**

- **Terraform and Ansible for infrastructure provisioning.**

## **Slide 15: Monitoring**

- **Grafana and Prometheus for system monitoring.**



## **Slide 16: Learning DevOps**

- **Understanding cultural aspects and tools.**
- **Emphasis on collaboration, automation, CI/CD.**