## ## Introduction - Day 1

- ✓ Fork this Repo.
- ✓ Start with a DevOps Roadmap[https://youtu.be/iOE9NTAG35g]
- ✓ Write a LinkedIn post or a small article about your understanding of DevOps

## What is DevOps?

DevOps combines development and operations to unite people, process, and products in application planning, development, delivery, and operations.

## • What is Automation, Scaling, Infrastructure?

- ➤ **Automation:** Automation is the use of technology to perform tasks with reduced human assistance. Automation helps you accelerate processes and scale environments, as well as build continuous integration, continuous delivery, and continuous deployment (CI/CD) workflows.
- Scaling: Scalability is the ability of a system to scale up or down according to increased or decreased load. It increases or decreases resources according to need.

There are two types of scaling:

1. Vertical scaling: Ability to add resources in existing hardware to increase capacity. (Scaling up) Example: It is like a house which is already built, and you want to add 1 more bedroom, and you can add that room in same house.

<u>2. Horizontal Scaling:</u> Ability to increase capacity by adding new hardware and resources to work as separate entity. (Scale out)

Example: It is like a house which is already built, and you want to add 1 more room, but you cannot add that room in same house you need to build it separately near our existing house.

> **Infrastructure:** Infrastructure is the collection of hardware and software elements needed to enable cloud computing. It includes computing power, networking, storage etc.

## • Why DevOps is Important?

DevOps shortens the cycle time it allows organisations to rapidly deliver software and services to their end users. Because of high availability, scalability, reliability, predictability, security etc. it increases the availability, improves efficiency, increases resiliency and reduces cost. Because it enables collaboration between development and operations teams, it helps teams work together to quickly identify and resolve issues and improving customer satisfaction.