App should be easy to deploy, then scale up and scale down depending up on the traffic, and free from all technological dependencies.

What is that one architecture that will satisfy the business requirements?



# MicroServices

# Concept



### Objectives

- 1. What is MicroService?
- 2. Characteristics of MicroService Architecture
- 3. Advantages & Disadvantages
- 4. MicroService vs. Monolithic
- 5. Runtime environment?

#### **MicroService**

Creating smaller and multiple component services which are built to handled a very specific concern.

Multiple services makeup application

### Characteristics

## Autonomous

# Specialized

Accounts

**Payments** 

Shipping

Inventory

# Advantages

Flexible Scaling

**Easy Deployment** 

Technological Freedom

Reusable Code

Resilience

## Disadvantages

Spawning

Maintenance

**Duplicate Code** 

**Network Performance** 

#### Monolithic

 Processes are tightly coupled and run as a single service

Adding features becomes more complex

Adds risk for application availability

#### **MicroServices**

One service per process

 Each service performs one single function

 Can be updated, deployed, and scaled rapidly to meet demand

## Where do you run MicroServices?

Physical Servers | Virtual Machines | Containers

### Summary

- 1. What is MicroService?
- 2. Characteristics of MicroService Architecture
- 3. Advantages & Disadvantages
- 4. MicroService vs. Monolithic
- 5. Runtime environment

Coming up...

# Containers