# **Basics**

It is really essential to understand some basics components before jumping into kubeneretes.

## Virtual Machines (VMs):

Virtual machines do not make the best use space. Aps are not isolated which could cause config conflits, security problems or resource hogging.

### **Containers:**

containers allow you to run multiple apps which are virtually isolated from each other

#### Microservices:

- Multiple apps which are responsible for one thing
- Functionality are isolated and stateless

### **Kubernetes:**

Kubenerets is an open source container orchestration system for deployment scaling and management.

- Unique component is pod
- A pod is a group of one or more containers with shared storage and network resources & other settings
- K8s is ideal for microservice architecture