Kubernetes

Kubernetes is an open-source platform developed by google it is used for managing containerized workloads Kubernetes helps you to make your application scalable if the usage of the application goes up it automates it to create a new container or increase the nodes.

There is a couple of reasons that you should use Kubernetes:

- 1. Your application has multiple services running and you need to scale each service besides managing the containers Kubernetes also allow you to automate a lot of tasks related to resource provisioning and management using Kubernetes API.
- 2. Based on your application workload you need to scale up and down this is also referred to as point number one if you have multiple services running Kubernetes helps you easily manage that.
- 3. If you plan for the future to deploy your application into the cloud Kubernetes is easy as it can be no need to change everything to be able to work in the cloud server same configuration apply on everywhere.
- 4. Regarding cost wise you only pay for the resource that you use it means that based on demands those resource that is not in use will automatically destroy resources that are not in use this is called the auto-scaling capability of Kubernetes.

Kubernetes can be a little bit complex to learn and you need time to learn how it works but it is worth every minute for improving your software deployment life cycle easier and more efficiently.