

# Introduction to Docker and Kubernetes

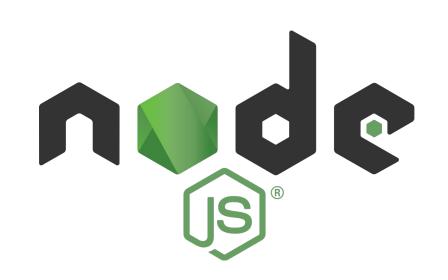


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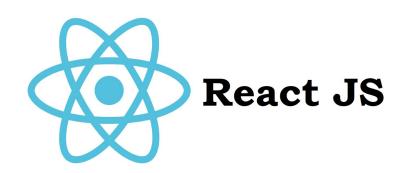
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# Why we need Docker?

- Compatibility / Dependency
- Long setup time
- Different Development / Testing /
   Production environments







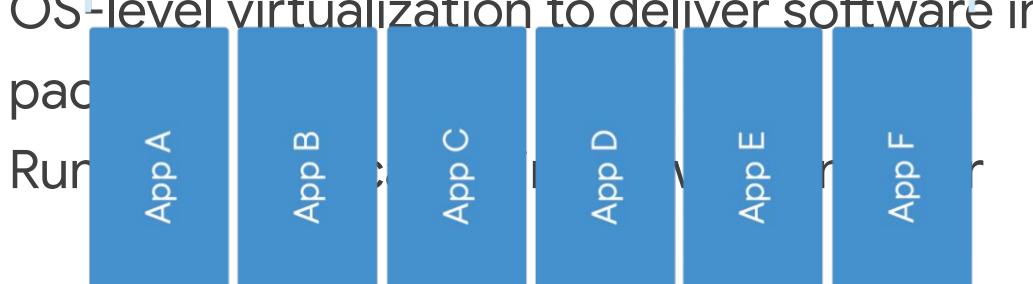


#### What is Docker?



A set of platform as a service products that use

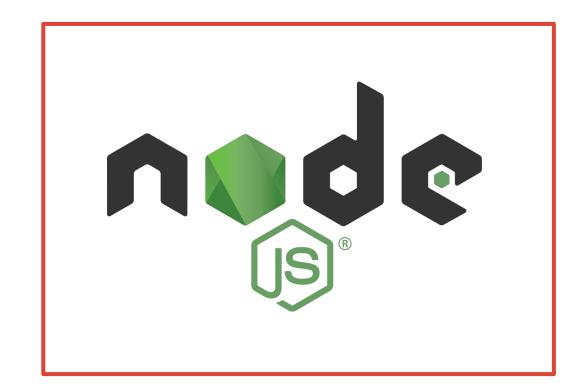
OS-level virtualization to deliver software in



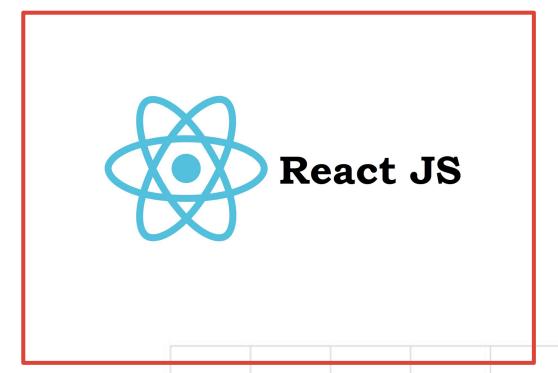
Docker

**Host Operating System** 

Infrastructure





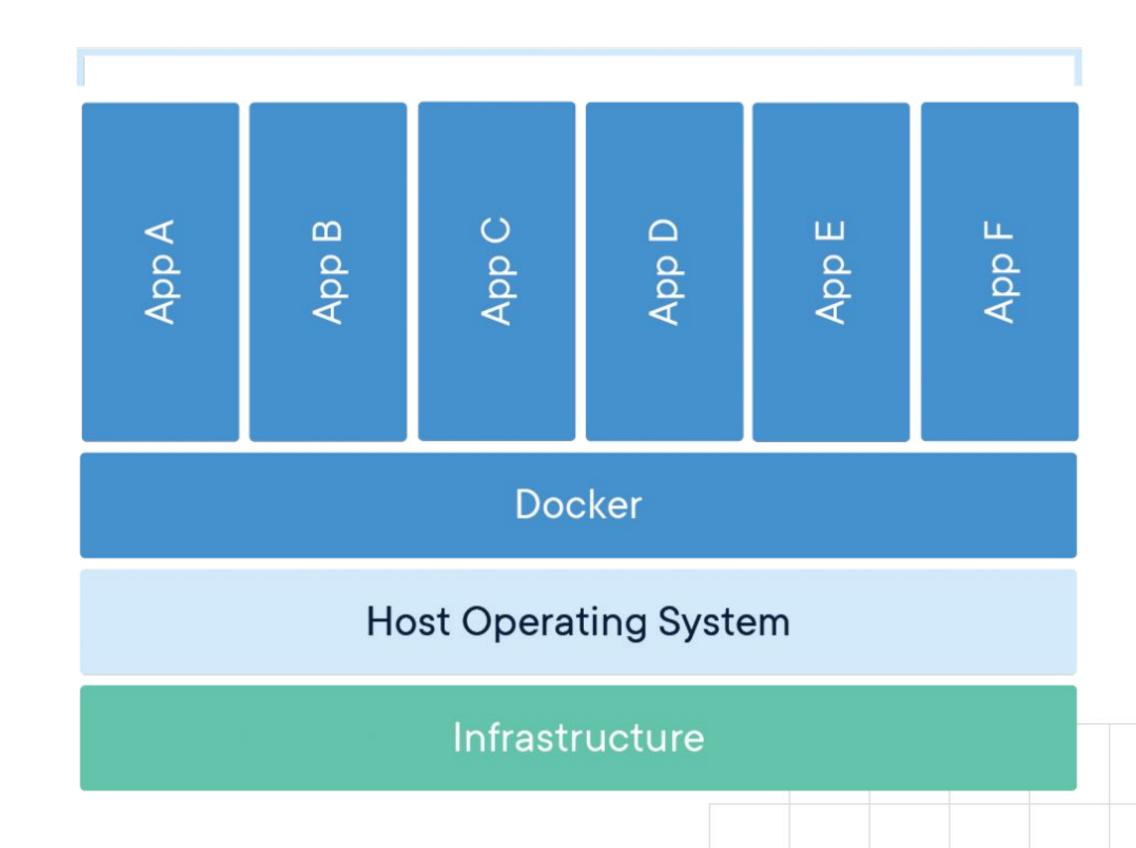


#### What is Docker?

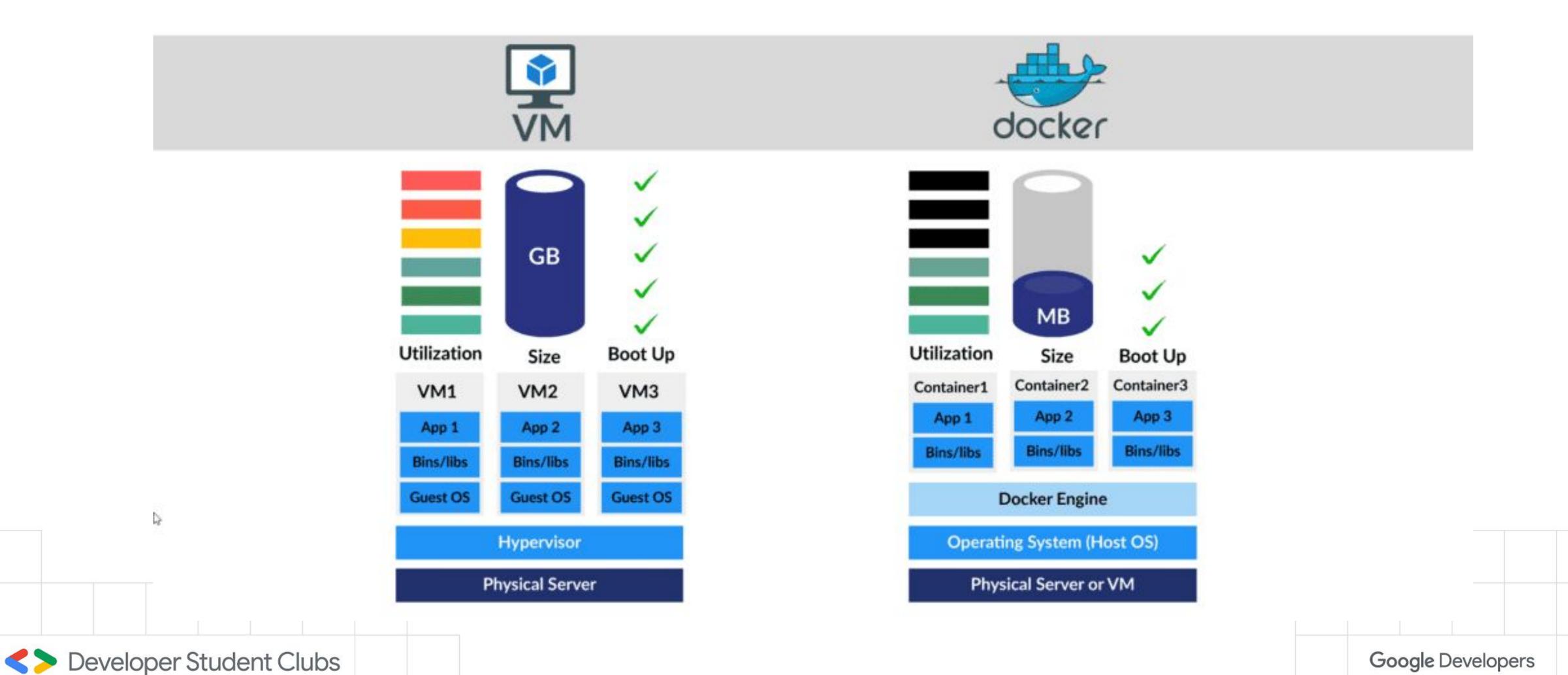


- A set of platform as a service products that use OS-level virtualization to deliver software in package
- Run each application in its own container

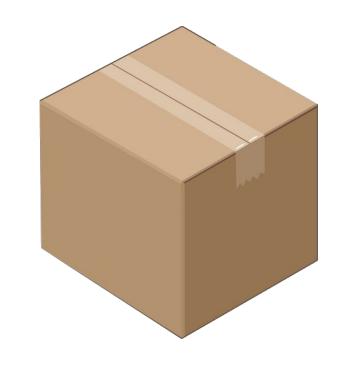
#### Containerized Applications



#### Container vs Virtual Machine



# Container and Image



**Docker Image** 

Application Package Template



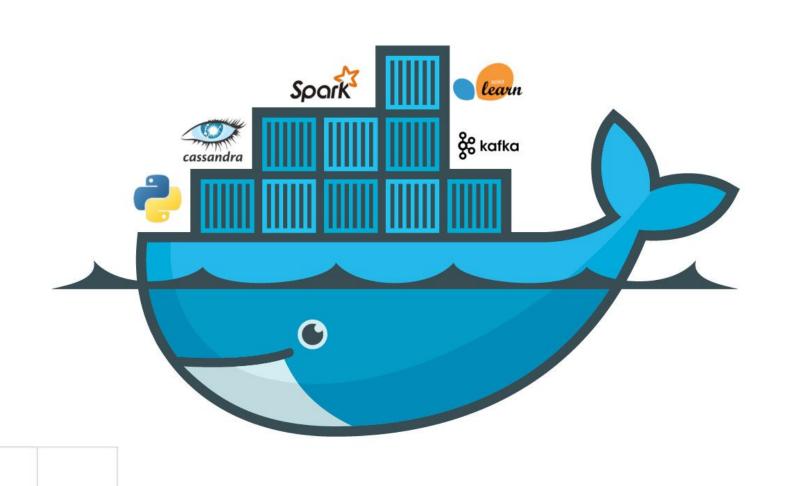


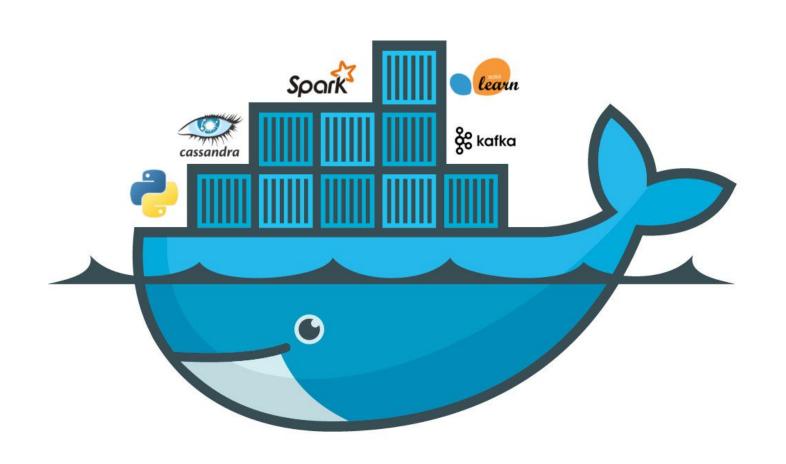


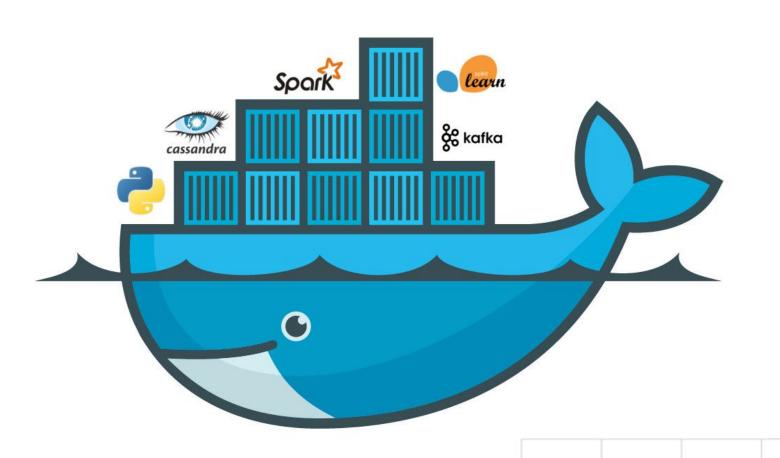
#### Container Orchestrate



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#### Container Orchestrate?

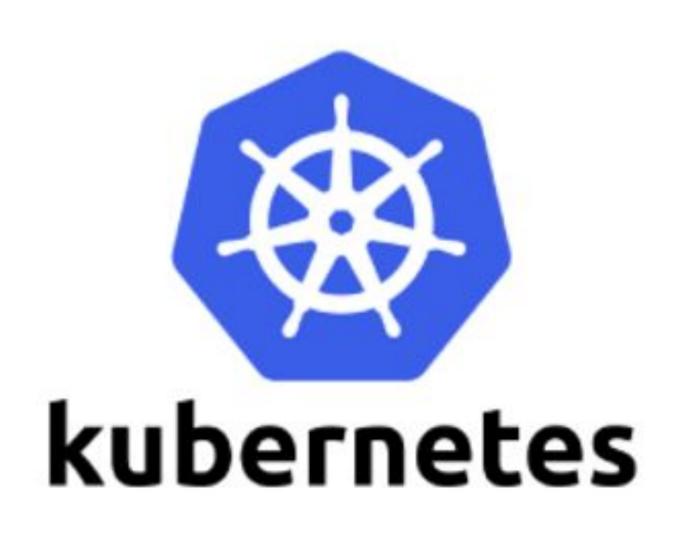
- Consists of a set of tools and scripts that can help host containers in different environments.
- To automates the deployment, management, scaling and networking of containers
- Deploy the same application across different environment without needing to redesign it.

## Why Container Orchestration?

- Deploy
- Configuring and scheduling of containers
- Network Load balancing, traffic routine and service discovery of containers
- Health monitoring of containers
- Security, securing the interaction between containers
- Availability of containers



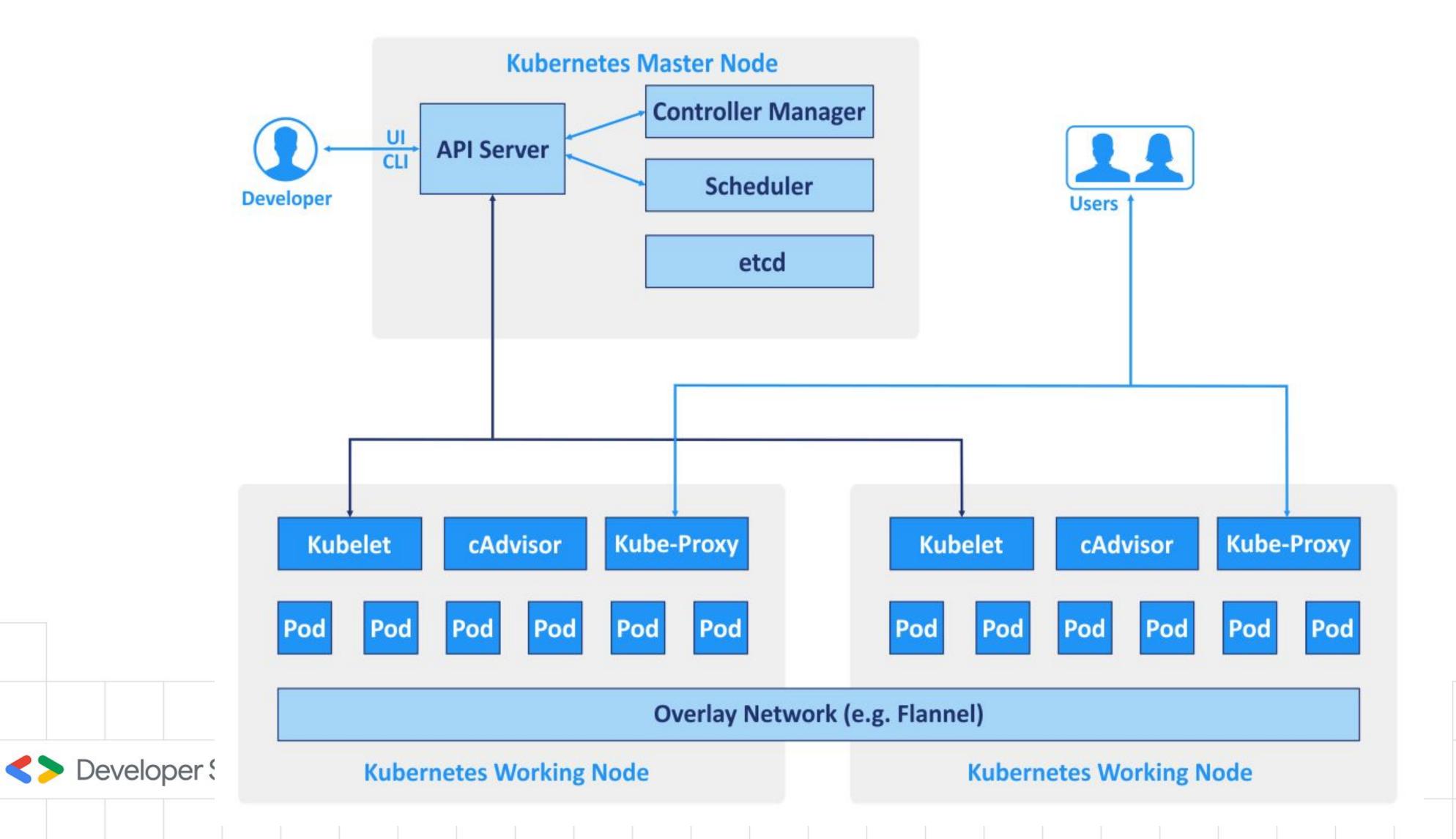
#### Container Orchestration Tools





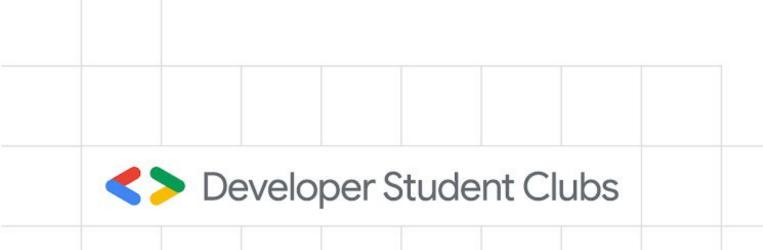


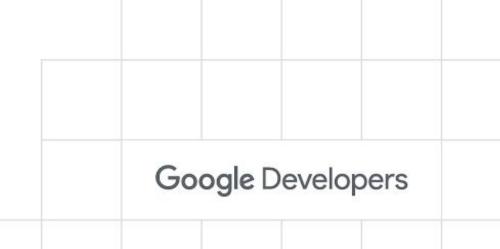
#### Container Orchestration Tools



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### Demo





#### Bonus!!!

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