

IDS PROJECT 6: BOOKSTORE

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Technologies Used



Google Cloud Platform



Why JHipster Framework?

Monolithic Architecture.

Large Compatibility

Quick to deploy



Java Spring Boot



Framework for “dependency-injection” (pattern that allows to build decoupled systems).

```
public interface UserLister {  
    List<User> getUsers();  
}
```

```
public class UserListerDB implements UserLister {  
    public List<User> getUsers() {  
        // DB access code here  
    }  
}
```

```
<bean id="userLister" class="UserListerDB" />
```

```
<bean class="SomeView">  
    <property name="userLister" ref="userLister" />  
</bean>
```

```
public class SomeView {  
    private UserLister userLister;
```

```
UserLister userLister = new UserListerDB();
```

```
    public void render() {  
        List<User> users = userLister.getUsers();  
        view.render(users);
```

```
UserLister userLister = new UserListerCommaSeparatedFile();
```

```
    }  
}
```



kubernetes

by Google™

- Container for cloud platform.
- Why use it?

Autoscaling





Load Balancing



kubernetes

Remote Storage

Service Discovery

	 amazon web services	 Google Cloud Platform	 Microsoft Azure	 openstack™	Bare Metal
Autoscaling	Autoscaling Group	Autoscaler	Scale Set	Heat Scaling Policy	X
Load Balancing	Elastic Load Balancer	Load Balancer	Load Balancer	LBaaS	X
Remote Storage	Elastic Block Store	Persistent Disk	File Storage	Block Storage	X
Service Discovery	X	X	X	X	X



OS Virtualization

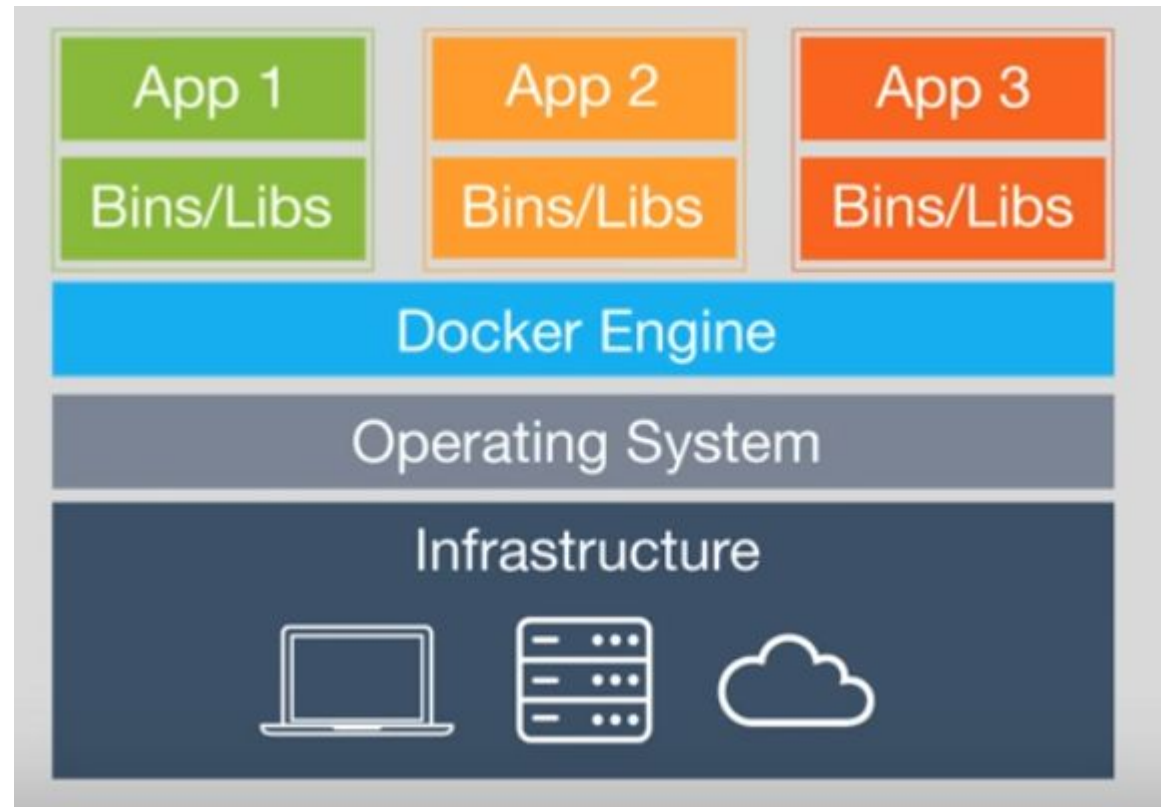
Use drivers, not a virtualization system.

Portability

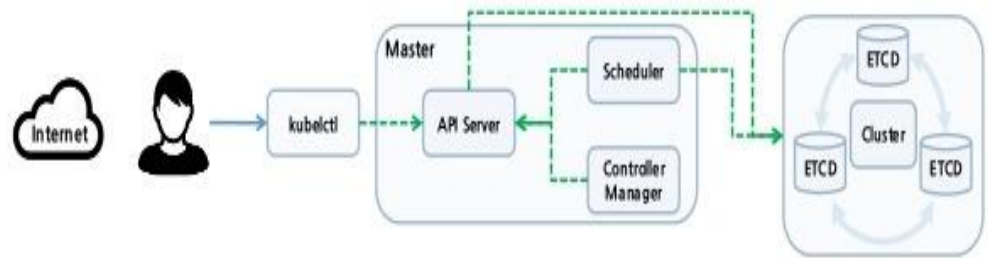
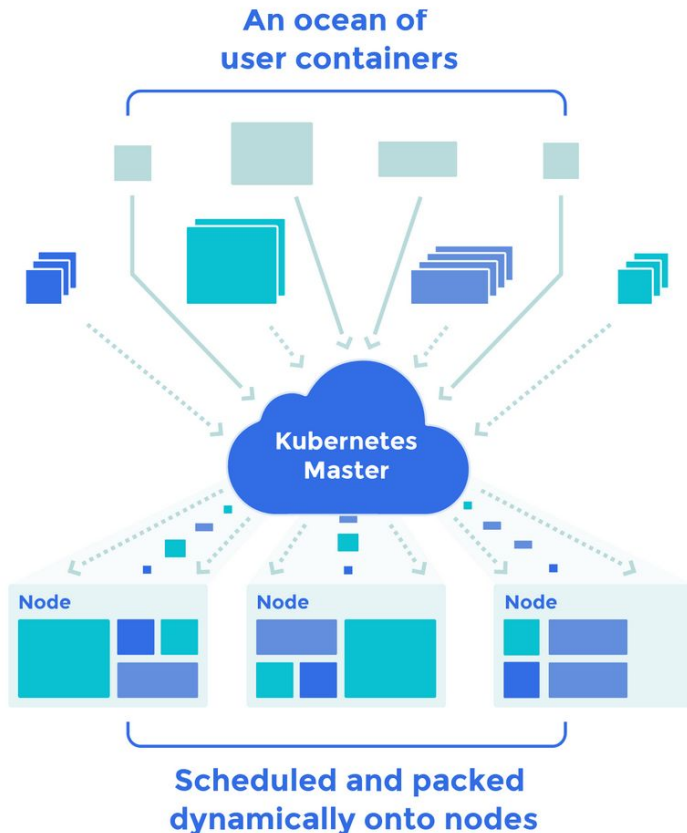
Containers

Flexibility

OpenSource

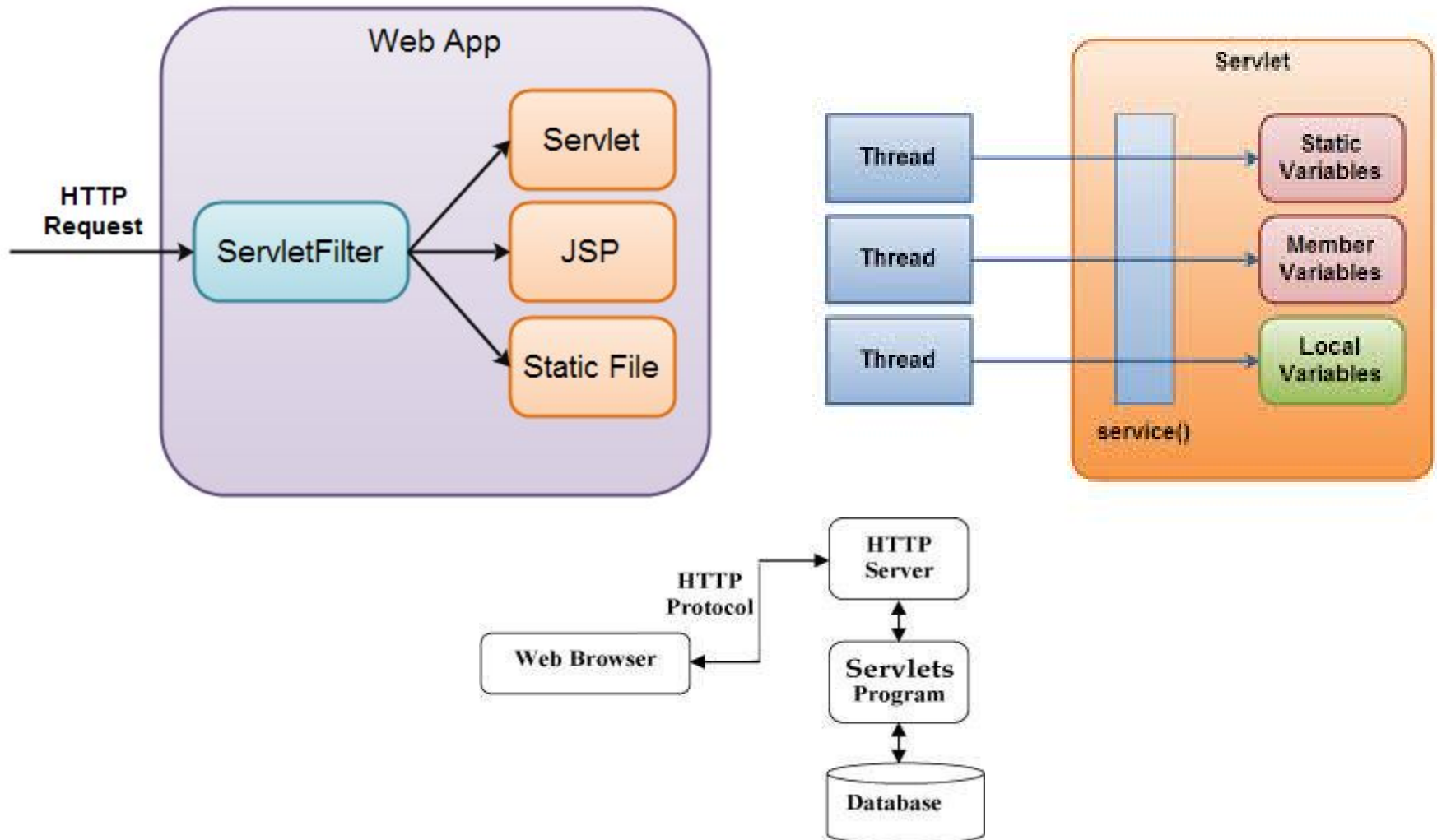


Docker images and Kubernetes



<https://image.slidesharecdn.com/introducegooglekubernetes-150905013438-lva1-app6892/95/introduce-google-kubernetes-68-638.jpg?cb=1441676184>
https://encrypted-tbn2.gstatic.com/images?q=tbn:ANd9GcRnHhgvQ-uxy2jfjamrjU34wTpKluPOUCoURf0XD572S_PcffimNQ

About Servlets and Web Servers





Google Cloud Platform

IaaS



Google Compute Engine

SaaS

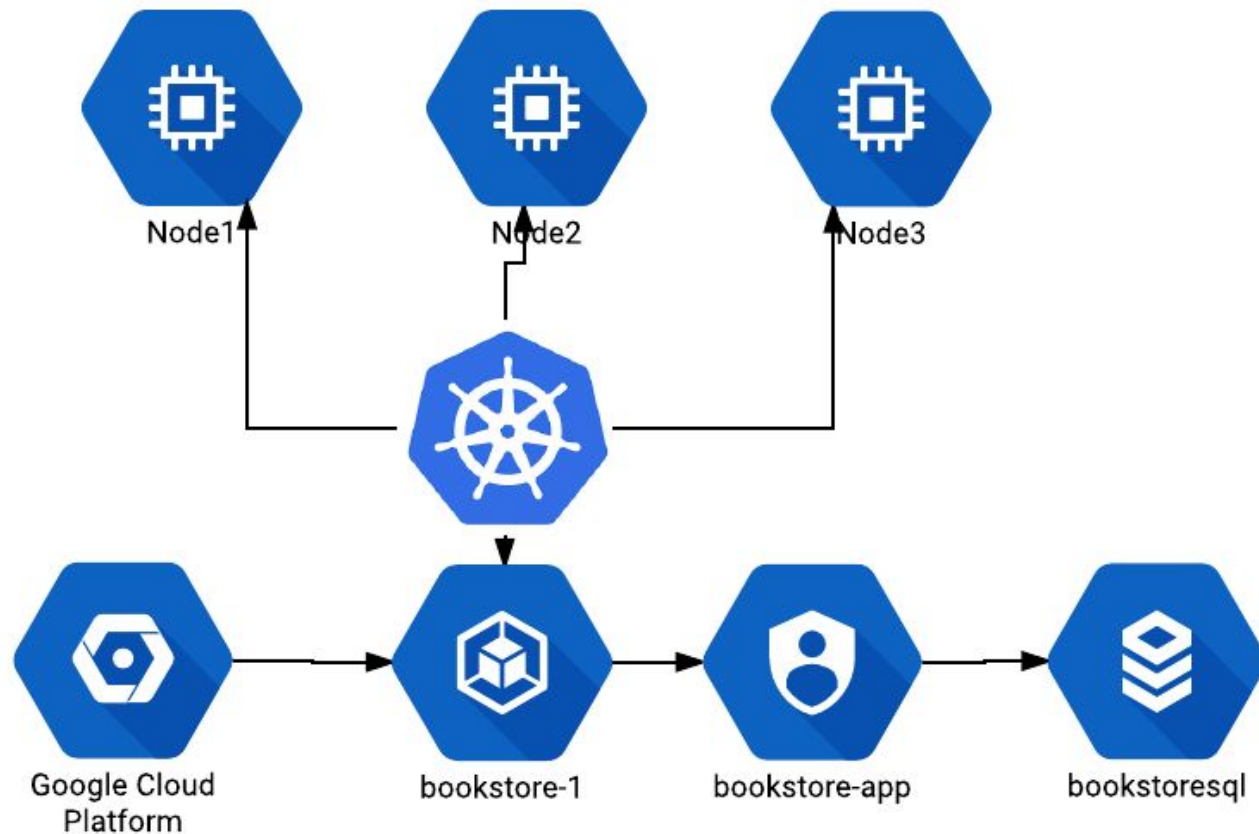


PaaS



App Engine

Architecture



Difficulties faced

- How to implement with Node.js
- How to work with the framework that propose Yeoman
- How to work with Liquibase
- Build a Docker image that run in Kubernetes
- Understand the protocol of communication between
Google Cloud Sql and Google Container Engine

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