IDS PROJECT 6: BOOKSTORE

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http://tinyurl.com/bookstoreIDS
Bookstore Application Repository

UNIVERSITÉ **Grenoble Alpes**

Technologies Used

Why JHipster Framework

Monolithic Architecture.
Large Compatibility
Quick to deploy

Java Spring Boot

![spring by Pivotal]

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

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

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

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

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

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

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

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

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

kubernetes
by Google

- Container for cloud plattaform.
- Why use it?

Autoscaling

Load Balancing

kubernetes

Remote Storage

Service Discovery

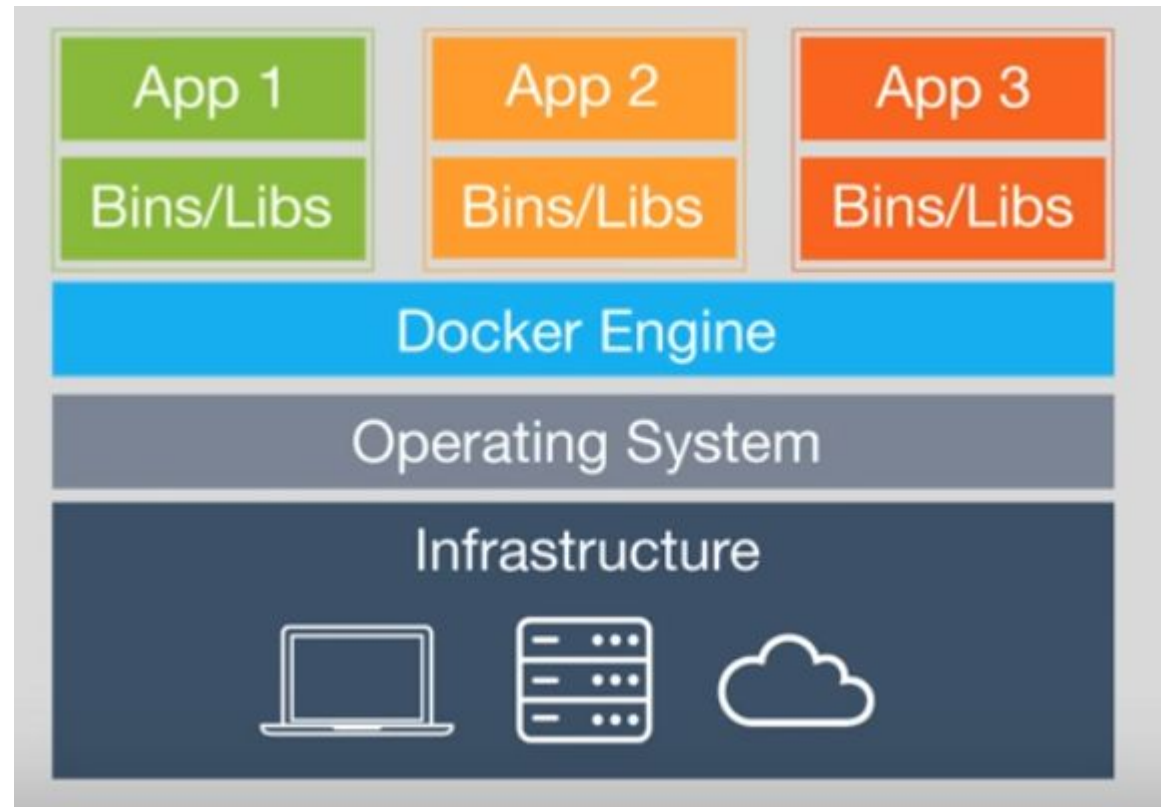|	amazon web services	Google Cloud Platform	Microsoft Azure	openstack	Bare Metal
Autoscaling	Autoscaling Group	Autoscaler	Scale Set	Heat Scaling Policy	X
Load Balancing	Elastic Load Balancer	Load Balancer	Load Balancer	LBaaS	X
Remote Storage	Elastic Block Store	Persistent Disk	File Storage	Block Storage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

![docker](docker logo)

OS Virtualization
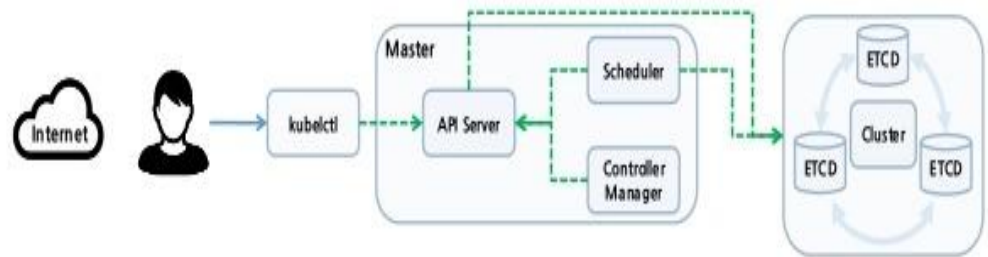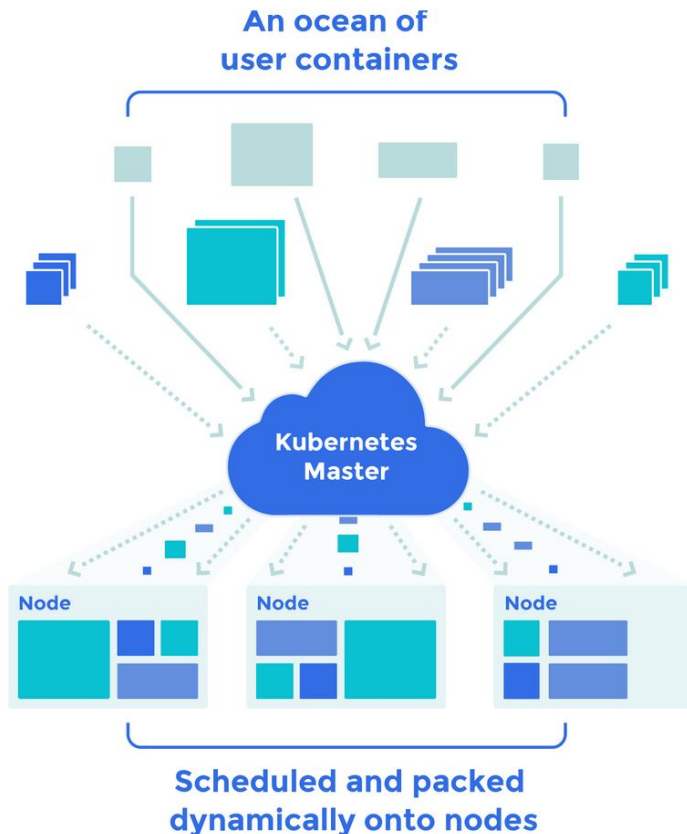Use drivers, not a virtualization system.
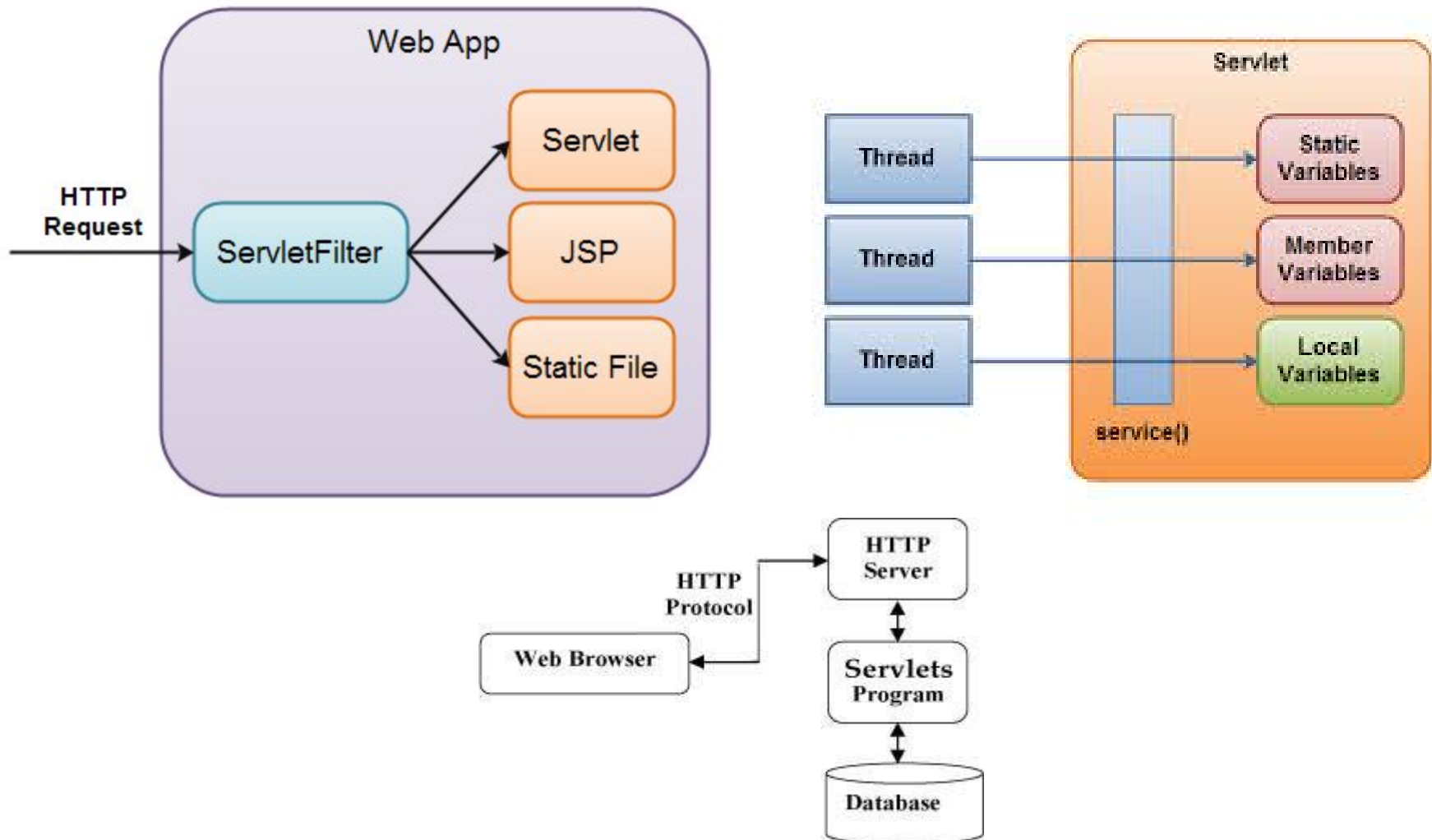Portability
Containers
Flexibility
OpenSource

Docker images and Kubernetes

About Servlets and Web Servers

Google Cloud Platform

IaaS
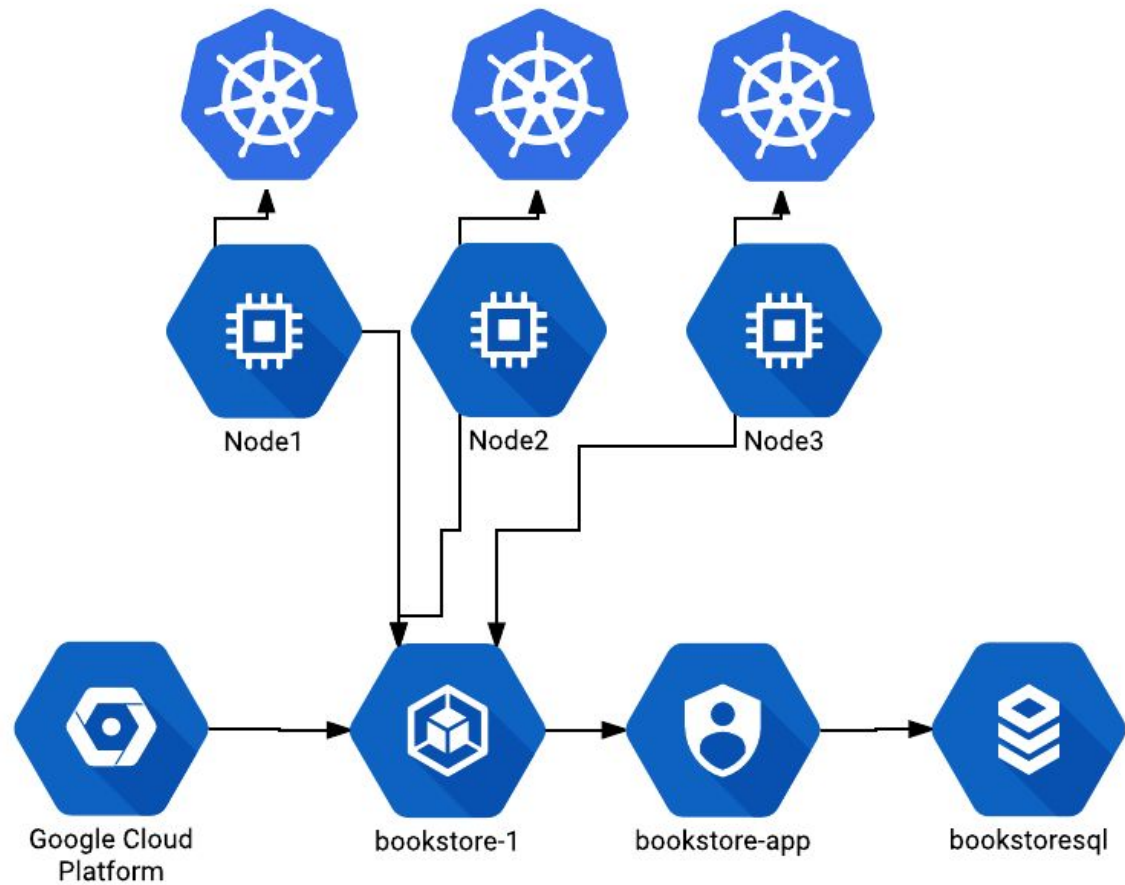

Google Compute Engine

SaaS

Google Apps

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 Liquidbase
- Build a Docker image that run in Kubernetes
- Understand the protocol of communication between Google Cloud Sql and Google Container Engine