

Configuration of Spring and JPA for development



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Configuration



Database

JPA Abstraction Layer
Any Relational Database
Dialect
MySQL
Docker

docker-compose.yml

```
db:  
  image: mysql:5.7  
  container_name: conference  
  ports:  
    - 3306:3306  
  volumes:  
    - "./data/db:/var/lib/mysql"  
  environment:  
    MYSQL_ROOT_PASSWORD: pass  
    MYSQL_DATABASE: conference
```

Docker Tips

docker-compose up -d

docker-compose down

docker ps

docker inspect <pid>

docker inspect <pid> | grep "IPAddress"

```
<dependency>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-data-jpa</artifactId>
</dependency>
```

Adding Jars with Maven

Version

Transitive Dependencies

persistence.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<persistence version="2.1"
    xmlns="http://xmlns.jcp.org/xml/ns/persistence"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/persistence
    http://xmlns.jcp.org/xml/ns/persistence/persistence_2_1.xsd">
// ...
```

EntityManagerFactory

```
EntityManagerFactory entityManagerFactory =  
Persistence.createEntityManagerFactory("PUNIT");  
EntityManager entityManager =  
entityManagerFactory.createEntityManager();  
entityManager.getTransaction().begin();
```

```
Registration reg = new Registration("Bob", "Builder",  
"bobthebuilder@pluralsight.com");  
entityManager.persist(reg);  
entityManager.getTransaction().commit();  
entityManager.close();  
entityManagerFactory.close();
```

```
<dependency>
    <groupId>mysql</groupId>
    <artifactId>mysql-connector-java</artifactId>
</dependency>
```

Adding MySQL Maven Dependency

Version

Transitive Dependencies

Transactional

```
@Transactional  
public void createRegistration(Registration reg) {  
    registrationRepository.save(reg);  
}
```

`logging.level.org.hibernate.SQL=debug`

`spring.jpa.show-sql=true`

`spring.jpa.properties.hibernate.format_sql=true`

Tips and Tricks

Log Level

Show Queries

Summary

Database

Docker

Docker Tips

Legacy

Added Jars

Transactions

Tips and Tricks