

## Phase 3

Total session 9

Spring framework and Spring boot, Unit testing, Rest full web service and micro service using Spring framework/spring boot

## Day 4

Spring ORM (Object Relation Mapping )

Spring framework allow us to integrate with existing ORM tool like hibernate or JPA etc.

JPA : Java Persistence API . JPA is a part of Java technologies. JPA is type of EJB.

Hibernate : It is a framework part of third party ie jboss.

JPA is provide specification as well as implementation. Hibernate is implementation of JPA.

## ORM

Hibernate	JPA
SessionFactory	EntityManagerFactory
Session	EntityManager
Transaction	EntityTransaction
save	persists
delete	remove
update	merge
find	get
hibernate.cfg.xml	persistence.xml

## Spring MVC with Hibernate Configuration

In spring mvc project with hibernate we need provide all hibernate configuration details in spring configuration file ie dispatcher-servlet.xml file. In dao layer we need to do the DI for SessionFactory.

Create dynamic web project with version 2.5 and convert this project to maven project.

Spring orm module provided pre defined class ie **LocalSessionFactoryBean** which help to provide or inject SessionFactory in dao layer.

Spring core or context project

Can be

1. Singleton
2. Prototype

In web application scope can

3. request
4. session
5. application