

# JPA



Java Persistence API

# Review Topics:

- Introduction
- what is the JPA?
- What is the JPA contains of?
- Why developers should Create the JPA?
- Is there Relationship between the EJB and JPA?
- What the JPA dose exactly?
- Sample process of java persistence API.
- Comparing between the EJB3 and the EJB2?
- What the advantages of using the JPA?
- what is my Tutorial ?
- Questions?

# Introduction

- One of the significant improvement in the java platform is the JPA.
- This is because it offers developers much easier way to access and manipulate relational data in the java application.
- There is more than that .
- The reaction to the java persistence has been extremely positive from the java community
- JPA has had a good start with strong acceptance by the java developers.

# What is JPA?

- JPA stands for **a java persistence API** which is Javax. Persistence Package. Basically , it is a Java programming Language framework that helps developers to control relational data in java platform. The JPA exactly was described as part of the EJB3.0 , which is a replacement to the EJB2CMP Entity Beans specification, specification . As we know that **a java persistence API** is the newest of several Java persistence specifications.

## What is persistence consists of.. ?

- Any persistence consists of there Areas:
- The API, defined in the Javax. Persistence package
- The java persistence Query Language
- Object / relational meta data.

# What JPA does exactly?

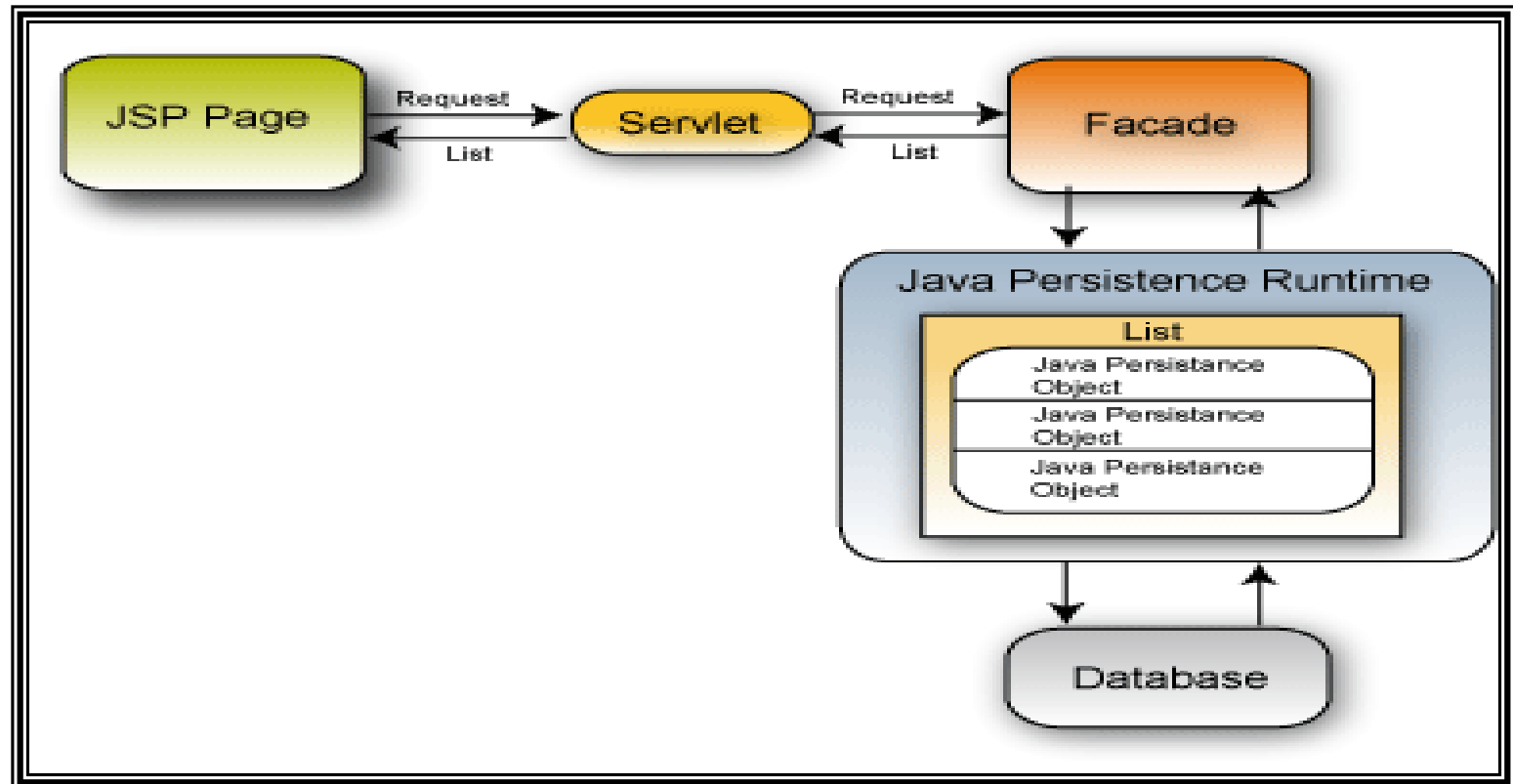
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- JPA defined a runtime Entity Manager API processing queries and transaction on the objects against the database.
- It is defined a objects-level query language JPQL to allow querying of the objects from the database.

## What is java persistence query language is used for?

- Basically, JPQL stands for Java Persistence Query Language. And it is used to make queries for against entities stored in a relational database. Queries resemble SQL queries in syntax, but operate against entity objects rather than directly with database tables.

# Sample Process of Using Java Persistence API





# Why we should use the Java Persistence API?

- **There is a great Motivation for creating JPA**
- Many enterprise Java developers have been using lightweight persistent objects, which supported by open-source frameworks or data access objects as a substitute of entity beans. This is because entity beans and enterprise beans were too heavyweight and complicated. Furthermore, they could only be used in Java EE application servers.

# Summary of the Advantages of JPA

- JPA Requires Just smaller number of classes and interfaces
- It gets rid of lengthy deployment descriptors through annotations
- JPA Addresses most typical specifications through annotation defaults.
- JPA supports easier, cleaner, and standardized object-relational mapping.
- It add support for polymorphism, and inheritance.
- Also, dynamic queries and named queries is added to the JPA
- Supports a Java Persistence query language -- an improved EJB QL
- Makes it easier to test entities outside of the EJB container
- Can be used outside of the container

# Questions

