

Hibernate

Aralık - 2022

Miraç

Basic Annotations

Entity, Table, Id, Column etc.

Embedded Annotations

OneToMany - ManyToOne

HQL

Hibernate Query Language.

OneToOne Relation

ManyToMany Relation

Fetch Types

Lazy, Eager

Get-Load Methods

Hibernate Session

Cache Level

First Level - Second Level

Hibernate Lifecycle

States: Transient, Persistent, Detached, Removed

JPA EntityManager

Hibernate

General Questions

What is Persistence?
Hibernate?

What is

What is JDBC?

What is JPA?

What is ORM?

0

OOP

1

Object Oriented Programming
Java, C# , C++

0

Database

3

RDBMS...
MySQL, PostreSQL, SQL Server

0

Kalıcı Data

2

Datayı kalıcı hale getirme
ihtiyacı ve Persistence kavramı

0

CRUD Operations

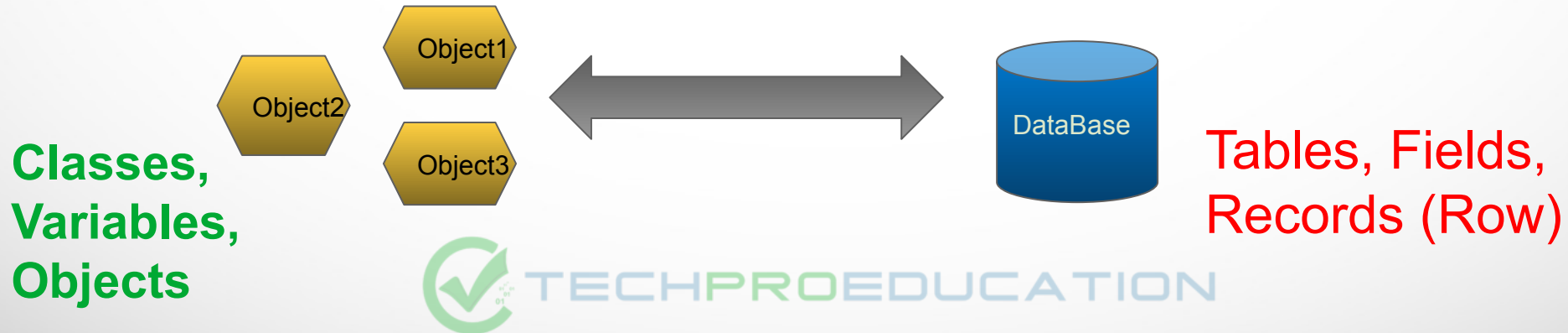
4

Create, Read, Update, Delete.

HIBERNATE



- ❏ JDBC: Java Database Connectivity API
- ❏ ORM Object Relational Mapping
 - ~ Kalıcı Data ile ilgili Sorunlara Çözüm
 - ~ JDBC BoilerPlate Kodlar
- ❏ ORM ve RDBMS , daha az SQL kodu
- ❏ ORM framework / tools: Hibernate, EclipseLink, TopLink, IBatis etc.



HIBERNATE - JPA



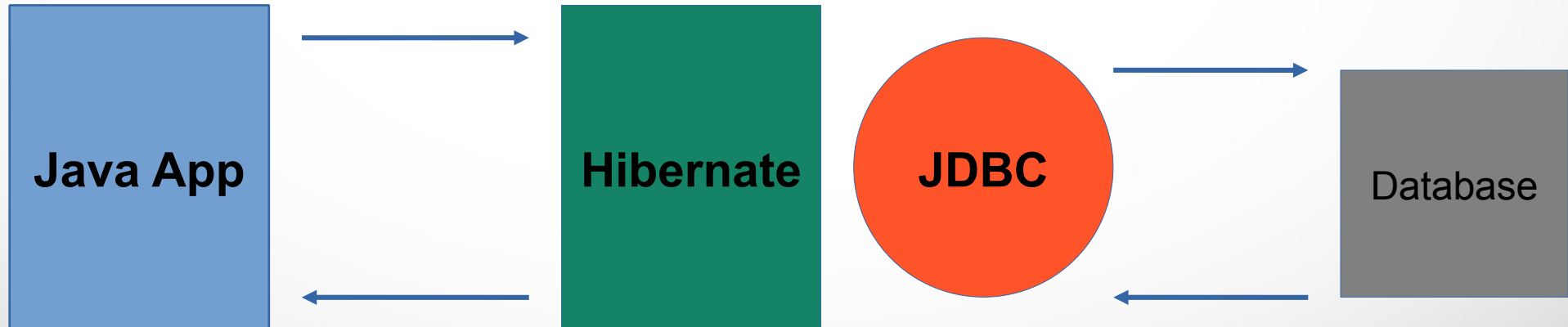
JPA (Java Persistence API)

- ~ JPA bir spesifikasyondur
 - Kontrolsüz ORM Frameworkleri
- ~ Hibernate, ORM Framework ler içinde JPA yı implement eden en popüler tool dur.
- ~ The Java Persistence API (JPA) ismini 2019 yılında Jakarta Persistence olarak değiştirdi.

HIBERNATE - JDBC



- Hibernate bütün database iletişiminde JDBC'yi kullanır
- Hibernate, JDBC'nin bir üst katmanıdır.
- Uygulamamız datayı almak ve kaydetmek için hibernate API'yi kullanır



HIBERNATE Proje Oluşturma



1. maven project
2. dependencies into pom.xml file
 - ~ Hibernate core
 - ~ PostgreSQL connector
3. Hibernate Configuration File
 - url, username, password , etc.
4. Add Java Class and Annotate It
 - ~ @Entity, @Table, @Id, @Column etc.

MAVEN DEPENDENCIES

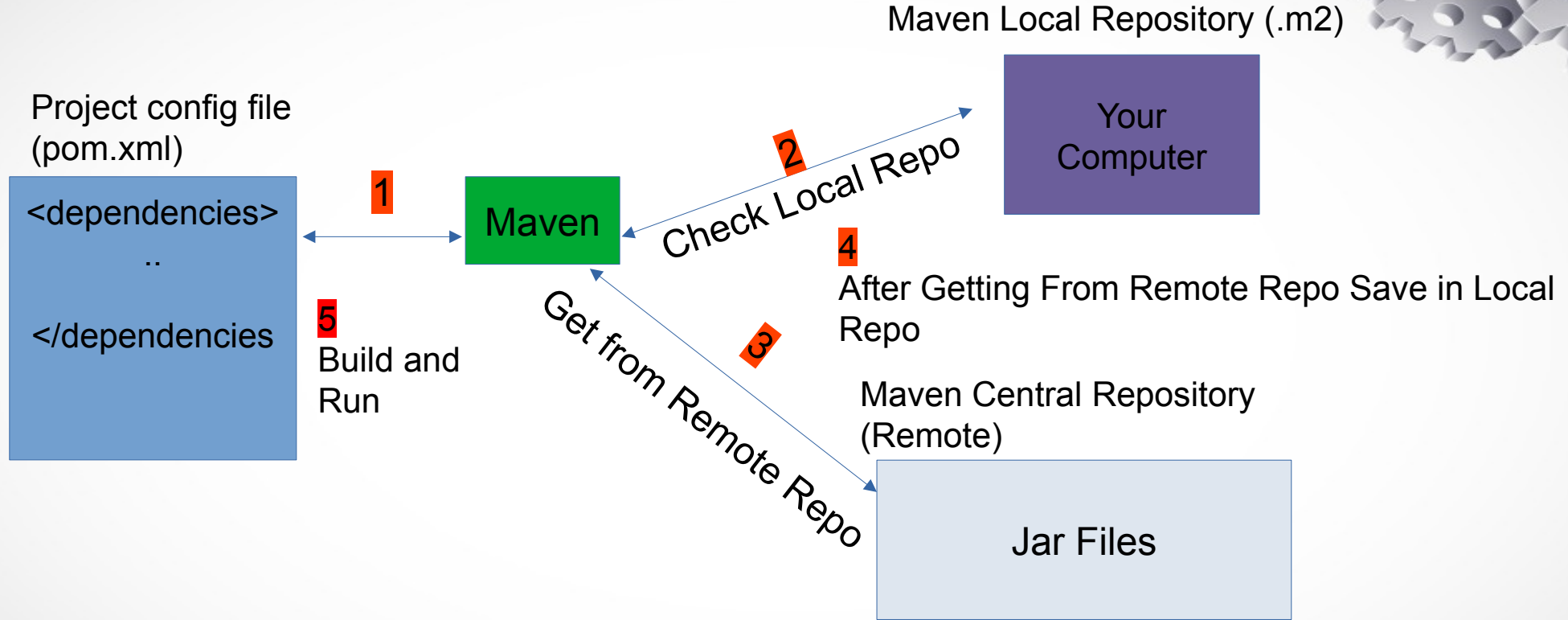


Maven dependencies

- `<dependency>`
- `<groupId>org.hibernate</groupId>`
- `<artifactId>hibernate-core</artifactId>`
- `<version>5.6.8.Final</version>`
- `</dependency>`

```
<dependency>  
  <groupId>org.postgresql</groupId>  
  <artifactId>postgresql</artifactId>  
  <version>42.3.6</version>  
</dependency>
```

MAVEN nasıl Çalışır?



MAVEN LOCAL REPOSITORY



- Local Repository for Different OS
 - ✓ MS Windows: `C:\Users\your user home\.m2\repository`
 - ✓ MAC and Linux: `~/.m2/repository`