

[Java Arrays](#) [Java Strings](#) [Java OOPs](#) [Java Collection](#) [Java 8 Tutorial](#) **Courses @SALE** [Java Multithreading](#)

Spring - ORM Framework

D dudhanevrushali28

[Read](#)[Discuss](#)[Practice](#)

Spring-ORM is a technique or a Design Pattern used to access a relational database from an object-oriented language. ORM (Object Relation Mapping) covers many persistence technologies. They are as follows:

- **JPA(Java Persistence API):** It is mainly used to persist data between Java objects and relational databases. It acts as a bridge between object-oriented domain models and relational database systems.
- **JDO(Java Data Objects):** It is one of the standard ways to access persistent data in databases, by using plain old Java objects (POJO) to represent persistent data.
- **Hibernate** – It is a Java framework that simplifies the development of Java applications to interact with the database.
- **Oracle Toplink, and iBATIS:** Oracle TopLink is a mapping and persistence framework for Java development.

For the above technologies, Spring provides integration classes so that each of these techniques can be used following Spring principles of configuration, and easily integrates with Spring transaction management.

For each of the above technologies, the configuration consists of injecting the DataSource bean into some kind of SessionFactory or EntityManagerFactory, etc. For pure JDBC(Java Database Connectivity), integration classes are not required apart from JdbcTemplate because JDBC only depends on a DataSource.

If someone wants to use an ORM like JPA(Java Persistence API) or Hibernate then you do not need spring-JDBC, but only this module.



Tip: Pre-requisites required before learning/reading Spring ORM Framework are given below as follows:

- Strong knowledge of [Java](#) is required
- Knowledge of the spring framework is required
- Knowledge of the above-mentioned persistence technologies is also required.

Note: The Spring Framework is an application framework and also an inversion of the control container for the Java platform. The framework's core features can be used by any of the Java applications, but there are some extensions for building web applications on top of the Java EE (Enterprise Edition) platform.

Advantages of the Spring Framework About ORM Frameworks

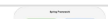
1. Due to the Spring framework, you do not need to write extra codes before and after the actual database logic such as getting the connection, starting the transaction, committing the transaction, closing the connection, etc.
2. Spring has an IoC(Inversion of control) approach which makes it easy to test the application.
3. Spring framework provides its API for exception handling along with the ORM framework.
4. By using the Spring framework, we can wrap our mapping code with an explicit template wrapper class or AOP(Aspect-oriented programming) style method interceptor.

Related Articles

We use cookies to ensure you have the best browsing experience on our website. By using our site, you acknowledge that you have read and understood our [Cookie Policy](#) & [Privacy Policy](#)

- Last Updated : 24 Mar, 2022

Difference Between Spring DAO vs Spring ORM vs Spring JDBC



What is Spring Framework and Hibernate ORM?

Spring ORM Example using Hibernate



Spring Boot - Spring JDBC vs Spring Data JDBC



Hibernate - Difference Between ORM and JDBC




Introduction to Spring Framework



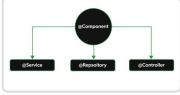
Aspect Oriented Programming (AOP)



 Introduction to the Spring Data Framework



Spring Framework Annotations




Spring - MVC Framework




Java AWT Tutorial





Spring MVC Tutorial





Spring Tutorial




Spring Boot Tutorial



Java 8 Features - Complete Tutorial



[Previous](#)

Next

dudhanevrushali28

D

Follow

<https://www.geeksforgeeks.org/spring-orm-framework/>

Easy

Normal

Medium

Hard

Expert

Article Tags : [Geeks-Premier-League-2022](#), [Picked](#), [Geeks Premier League](#), [Java](#)

Practice Tags : [Java](#)

[Improve Article](#)[Report Issue](#)**GeeksforGeeks**

A-143, 9th Floor, Sovereign Corporate
Tower, Sector-136, Noida, Uttar Pradesh -
201305

feedback@geeksforgeeks.org



Company

[About Us](#)[Legal](#)[Careers](#)[In Media](#)[Contact Us](#)[Advertise with us](#)

Explore

[Job-A-Thon Hiring Challenge](#)[Hack-A-Thon](#)[GfG Weekly Contest](#)[Offline Classes \(Delhi/NCR\)](#)[DSA in JAVA/C++](#)[Master System Design](#)

We use cookies to ensure you have the best browsing experience on our website. By using our site, you acknowledge that you have read and understood our [Cookie Policy](#) & [Privacy Policy](#)

Languages

Python
Java
C++
PHP
GoLang
SQL
R Language
Android Tutorial

DSA Concepts

Data Structures
Arrays
Strings
Linked List
Algorithms
Searching
Sorting
Mathematical
Dynamic Programming

DSA Roadmaps

DSA for Beginners
Basic DSA Coding Problems
Complete Roadmap To Learn DSA
DSA for FrontEnd Developers
DSA with JavaScript
Top 100 DSA Interview Problems
All Cheat Sheets
DSA Roadmap by Sandeep Jain

Web Development

HTML
CSS
JavaScript
Bootstrap
ReactJS
AngularJS
NodeJS
Express.js
Lodash

Computer Science

GATE CS Notes
Operating Systems
Computer Network
Database Management System
Software Engineering
Digital Logic Design
Engineering Maths

Python

Python Programming Examples
Django Tutorial
Python Projects
Python Tkinter
OpenCV Python Tutorial
Python Interview Question

Data Science & ML

Data Science With Python
Data Science For Beginner
Machine Learning Tutorial

DevOps

Git
AWS
Docker

[NumPy Tutorial](#)[GCP](#)[NLP Tutorial](#)[Deep Learning Tutorial](#)

Competitive Programming

[Top DSA for CP](#)[Top 50 Tree Problems](#)[Top 50 Graph Problems](#)[Top 50 Array Problems](#)[Top 50 String Problems](#)[Top 50 DP Problems](#)[Top 15 Websites for CP](#)

Interview Corner

[Company Wise Preparation](#)[Preparation for SDE](#)[Experienced Interviews](#)[Internship Interviews](#)[Competitive Programming](#)[Aptitude Preparation](#)

Commerce

[Accountancy](#)[Business Studies](#)[Economics](#)[Management](#)[Income Tax](#)[Finance](#)[Statistics for Economics](#)

SSC/ BANKING

[SSC CGL Syllabus](#)[SBI PO Syllabus](#)[SBI Clerk Syllabus](#)[IBPS PO Syllabus](#)[IBPS Clerk Syllabus](#)

System Design

[What is System Design](#)[Monolithic and Distributed SD](#)[Scalability in SD](#)[Databases in SD](#)[High Level Design or HLD](#)[Low Level Design or LLD](#)[Top SD Interview Questions](#)

GfG School

[CBSE Notes for Class 8](#)[CBSE Notes for Class 9](#)[CBSE Notes for Class 10](#)[CBSE Notes for Class 11](#)[CBSE Notes for Class 12](#)[English Grammar](#)

UPSC

[Polity Notes](#)[Geography Notes](#)[History Notes](#)[Science and Technology Notes](#)[Economics Notes](#)[Important Topics in Ethics](#)[UPSC Previous Year Papers](#)

Write & Earn

[Write an Article](#)[Improve an Article](#)[Pick Topics to Write](#)[Write Interview Experience](#)[Internships](#)

We use cookies to ensure you have the best browsing experience on our website. By using our site, you acknowledge that you have read and understood our [Cookie Policy](#) & [Privacy Policy](#)

SSC CGL Practice Papers

@geeksforgeeks , Some rights reserved