

Kindly go through

- a. SpringCore(XML, Annotation, PureJava)
- b. JDBC(Statement, PreparedStatement)
- c. ORM(hibernate:: Configuration,SessionFactory,Session,Transaction)

+++++

Basics of SpringBoot

+++++

- a. SpringBoot is a mechanism to create SpringRelated projects in easy way.
- b. SpringBoot supports Autoconfiguration for all the types of projects.
- c. SpringBoot application is created using 2 approaches
  - a. Maven
  - b. Gradle

+++++

Benefits of Working with SpringBoot

+++++

eg:: SpringJDBC

+++++

XML Configuration

+++++

```
<bean id = "dataSource" class =  
"org.springframework.jdbc.datasource.DriverManagerDataSource">  
  <property name = "driverClassName" value = "com.mysql.cj.jdbc.Driver"/>  
  <property name = "url" value = "jdbc:mysql://localhost:3306/PWSKILLS"/>  
  <property name = "username" value = "root"/>  
  <property name = "password" value = "root123"/>  
</bean>
```

Maven depedancy

+++++

```
<dependency>  
  <groupId>org.springframework</groupId>  
  <artifactId>spring-jdbc</artifactId>  
  <version>5.3.14</version>  
</dependency>
```

+++++

Working with SpringBoot Style

+++++

application.properties

+++++

```
spring.datasource.url=jdbc:mysql://localhost:3306/PWSKILLS  
spring.datasource.username=root  
spring.datasource.password=root123  
spring.datasource.driver-class-name = com.mysql.cj.jdbc.Driver
```

+++++

Maven Dependency

+++++

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

Project to perform CRUD operation using SpringJDBC

+++++

application.properties

spring.datasource.url=jdbc:mysql:///pwwskillsbatch

spring.datasource.username=root

spring.datasource.password=root123

pom.xml

+++++

<dependencies>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-data-jdbc</artifactId>

</dependency>

<!-- https://mvnrepository.com/artifact/mysql/mysql-connector-java -->

<dependency>

<groupId>mysql</groupId>

<artifactId>mysql-connector-java</artifactId>

<version>8.0.33</version>

</dependency>

</dependencies>

Code to perform Insert Operation

@Autowired

private JdbcTemplate jdbcTemplate;

int rowAffected = jdbcTemplate.update("insert into  
books(name,cost)values(?,?)",book.getName(),book.getCost());

Code to perform update operation

@Autowired

private JdbcTemplate jdbcTemplate;

int rowAffected = jdbcTemplate.update("update books set cost=? where id=?",  
book.getCost(), book.getId());

Code to perform Delete Operation

@Autowired

private JdbcTemplate jdbcTemplate;

return jdbcTemplate.update("delete from books where id = ?",id);

Code to perform select Operation using primary key

@Autowired

private JdbcTemplate jdbcTemplate;

return jdbcTemplate.queryForObject("select id,name,cost from books where id =  
?",

new Object[] { id },

(rs,rowNum) -> Optional.of(new

Book(rs.getInt(1),rs.getString(2),rs.getInt(3))));

Code to Perform select operation(retrieve all the records)

@Autowired

private JdbcTemplate jdbcTemplate;

return jdbcTemplate.query("select \* from books",

new RowMapper<Book>() {

```

        @Override
        public Book mapRow(ResultSet rs, int rowNum) throws
SQLException {
            System.out.println(rowNum);
            return new Book(rs.getInt(1), rs.getString(2),
rs.getInt(3));
        }
    };

```

Code to count no of records

```

    @Autowired
    private JdbcTemplate jdbcTemplate;
    return jdbcTemplate.queryForObject("select count(*) from books",
Integer.class);

```

Code to retrieve records based on name and price

```

    @Autowired
    private JdbcTemplate jdbcTemplate;
    return jdbcTemplate.query("select * from books where name like ? and
cost<=?",
        new Object[] {"%" + name + "%", price}, (rs, rowNum) -> new
Book(rs.getInt(1), rs.getString(2), rs.getInt(3)));

```

+++++
Working with NamedParameterJdbcTemplate
+++++

Code to update the record

```

    @Autowired
    private NamedParameterJdbcTemplate namedParameterTemplate;
    return jdbcTemplate.update("update books set cost =:cost where id=:id ", new
BeanPropertySqlParameterSource(book));

```

Code to read the record

```

    @Autowired
    private NamedParameterJdbcTemplate namedParameterTemplate;
    return namedParameterTemplate.queryForObject("select * from books where id
=:id", new MapSqlParameterSource("id", id),
        (rs, rowNum) -> Optional.of(new Book(rs.getInt(1),
rs.getString(2), rs.getInt(3))));

```