

The screenshot displays the Spring Tool Suite 4 IDE interface. On the left, the Project Explorer shows a project named 'zoho_crm1' with a directory structure including 'src/main/java' (containing packages like 'com.example.zoho_crm' with classes like 'ZohoCrmApplication.java', 'LeadController.java', 'Lead.java', 'LeadRepository.java', 'LeadService.java', and 'LeadServiceImpl.java') and 'src/main/resources' (containing 'static', 'templates', and 'application.properties'). The 'application.properties' file is selected and its content is shown in the main editor. The editor contains 11 lines of configuration for a Spring application, including database connection details and MVC settings. The 'Outline' view on the right is empty. At the bottom, the 'Boot Dashboard' is visible with various icons for running and debugging the application.

```
1 spring.application.name=zoho_crm1
2 spring.datasource.url=jdbc:mysql://localhost:3306/zoho_crm1
3 spring.datasource.username=root
4 spring.datasource.password=test
5
6 spring.jpa.hibernate.ddl-auto=create
7 spring.jpa.show-sql=true
8
9 spring.mvc.view.prefix=/WEB-INF/jsp/
10 spring.mvc.view.suffix=.jsp
11 |
```

The screenshot displays the Spring Tool Suite 4 IDE interface. The central editor shows the `Lead.java` file with the following code:

```
1 package com.example.zoho_crm.entity;
2
3 import javax.persistence.Entity;
4
5 @Entity
6 @Table(name="leads")
7 public class Lead {
8
9     @Id
10    @GeneratedValue(strategy = GenerationType.IDENTITY)
11    private long id;
12
13    private String fname;
14    private String lname;
15    private String email;
16    private long mobile;
17    public long getId() {
18        return id;
19    }
20    public void setId(long id) {
21        this.id = id;
22    }
23    public String getFname() {
24        return fname;
25    }
26    public void setFname(String fname) {
27        this.fname = fname;
28    }
29
30 }
```

The left sidebar shows the Project Explorer with the following structure:

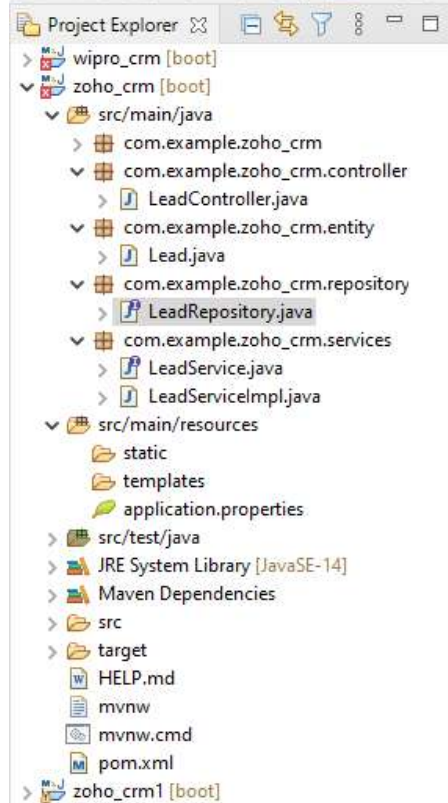
- wipro_crm [boot]
- zoho_crm [boot]
 - src/main/java
 - com.example.zoho_crm
 - com.example.zoho_crm.controller
 - LeadController.java
 - com.example.zoho_crm.entity
 - Lead.java
 - com.example.zoho_crm.repository
 - LeadRepository.java
 - com.example.zoho_crm.services
 - LeadService.java
 - LeadServiceImpl.java
 - src/main/resources
 - static
 - templates
 - application.properties
 - src/test/java
 - JRE System Library [JavaSE-14]
 - Maven Dependencies
 - src
 - target
 - HELP.md
 - mvnw
 - mvnw.cmd
 - pom.xml
 - zoho_crm1 [boot]

The right sidebar shows the Outline view with the following structure:

- com.example.zoho_crm.entity
 - Lead
 - id : long
 - fname : String
 - lname : String
 - email : String
 - mobile : long
 - getId() : long
 - setId(long) : void
 - getFname() : String
 - setFname(String) : void
 - getLname() : String
 - setLname(String) : void
 - getEmail() : String
 - setEmail(String) : void
 - getMobile() : long
 - setMobile(long) : void

Workspace - zoho_crm/src/main/java/com/example/zoho_crm/repository/LeadRepository.java - Spring Tool Suite 4

File Edit Source Refactor Navigate Search Project Run Window Help



Boot Dashboard



Type tags, projects, or working set names to match

application.properties Lead.java LeadRepository.java

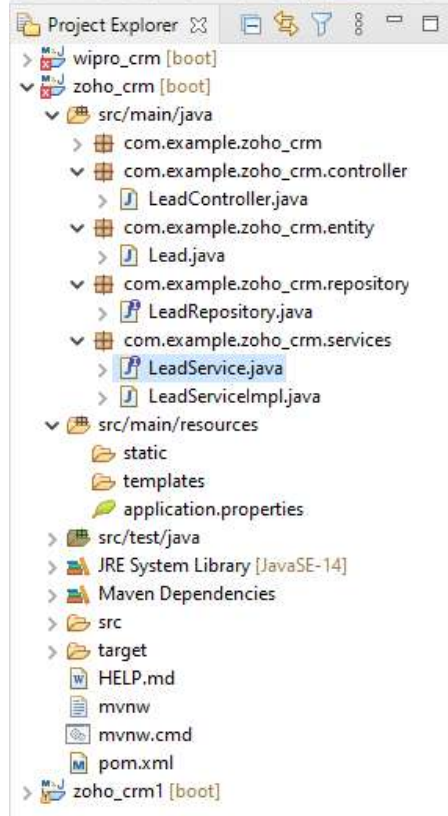
```
1 package com.example.zoho_crm.repository;
2
3 import org.springframework.data.jpa.repository.JpaRepository;
4
5 @Repository
6
7 public interface LeadRepository extends JpaRepository<Lead, Long> {
8
9 }
10
11
```

Outline

com.example.zoho_crm.repository
LeadRepository

Workspace - zoho_crm/src/main/java/com/example/zoho_crm/services/LeadService.java - Spring Tool Suite 4

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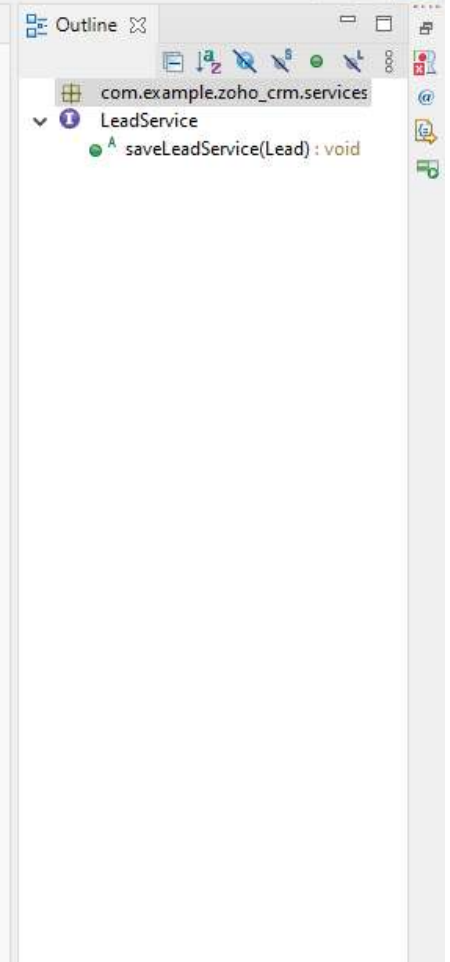


Boot Dashboard



Type tags, projects, or working set names to match

```
1 package com.example.zoho_crm.services;
2
3 import com.example.zoho_crm.entity.Lead;
4
5 public interface LeadService {
6     public void saveLeadService(Lead lead);
7 }
8
```



Workspace - zoho_crm/src/main/java/com/example/zoho_crm/services/LeadServiceImpl.java - Spring Tool Suite 4

File Edit Source Refactor Navigate Search Project Run Window Help

```
1 package com.example.zoho_crm.services;
2
3 import org.springframework.beans.factory.annotation.Autowired;
4
5 @Service
6
7 public class LeadServiceImpl implements LeadService {
8     @Autowired
9     private LeadRepository leadRepo;
10
11     @Override
12     public void saveLeadService(Lead lead) {
13         leadRepo.save(lead);
14     }
15 }
16
17
18
19
```

com.example.zoho_crm.services

- LeadServiceImpl
 - leadRepo : LeadRepository
 - saveLeadService(Lead) : void

Workspace - zoho_crm/src/main/java/com/example/zoho_crm/controller/LeadController.java - Spring Tool Suite 4

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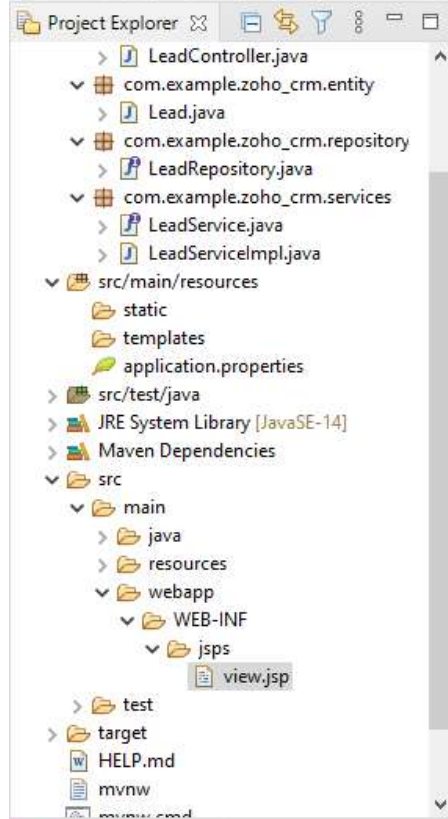
```
1 package com.example.zoho_crm.controller;
2
3 import org.springframework.beans.factory.annotation.Autowired;
4
5
6
7
8
9
10 @Controller
11 public class LeadController {
12
13     @Autowired
14     private LeadService leadServ;
15
16     // http://localhost:8080/view
17     @RequestMapping("/view")
18     public String view() {
19         return "view";
20     }
21
22     //action = savelead like servlet
23     @RequestMapping("/savelead")
24     public String savelead(Lead lead) {
25         leadServ.saveLeadService(lead);
26         return "view";
27     }
28 }
29
```

com.example.zoho_crm.controller

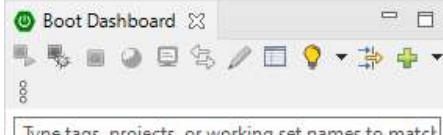
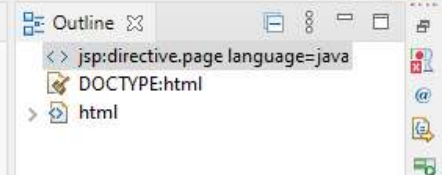
- LeadController
 - leadServ : LeadService
 - view() : String
 - savelead(Lead) : String

Workspace - zoho_crm/src/main/webapp/WEB-INF/jsp/view.jsp - Spring Tool Suite 4

File Edit Source Refactor Navigate Search Project Run Window Help



```
1 <%@ page language="java" contentType="text/html; charset=ISO-8859-1"
2   pageEncoding="ISO-8859-1"%>
3 <!DOCTYPE html>
4 <html>
5 <head>
6 <meta charset="ISO-8859-1">
7 <title>Lead view</title>
8 </head>
9 <body>
10 <h2>Lead View</h2>
11 <form action = "saveLead" method="post">
12 <pre>
13 First Name : <input type="text" name="fname" />
14
15 Last Name  : <input type="text" name="lname" />
16
17 Email      : <input type="text" name="email" />
18
19 Mobile     : <input type="text" name="mobile" />
20
21             <input type="submit" value="SAVE">
22 </pre>
23 </form>
24 </body>
25 </html>
```



MySQL Workbench

Local instance mysql x

FileEditViewQueryDatabaseServerToolsScriptingHelp

SQLFileDatabaseSchemaQuery

Limit to 1000 rows

Jump to

1

SELECT * FROM zoho_crm1.zoho_crm1;

Navigator

SCHEMAS

Filter objects

sakila

sample

sys

wipro_crm

world

zoho_crm

zoho_crm1

Administration

Schemas

Information

Schema: zoho_crm

Query 1

SQL File 3*

leads

leads

zoho_crm1 - Schema

zoho_crm1

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result Grid

Filter Rows:

idemailfnamelnamemobile

NULLNULLNULLNULLNULL

zoho_crm1 2

Apply

Revert

Context Help

Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 1	11:21:45	Apply changes to zoho_crm1	Changes applied	
✓ 2	11:24:09	SELECT * FROM zoho_crm1.zoho_crm1 LIMIT 0, 1000	0 row(s) returned	0.281 sec / 0.000 sec
✓ 3	11:26:14	SELECT * FROM zoho_crm1.zoho_crm1 LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec