Java Full Stack Development

Skilling-8

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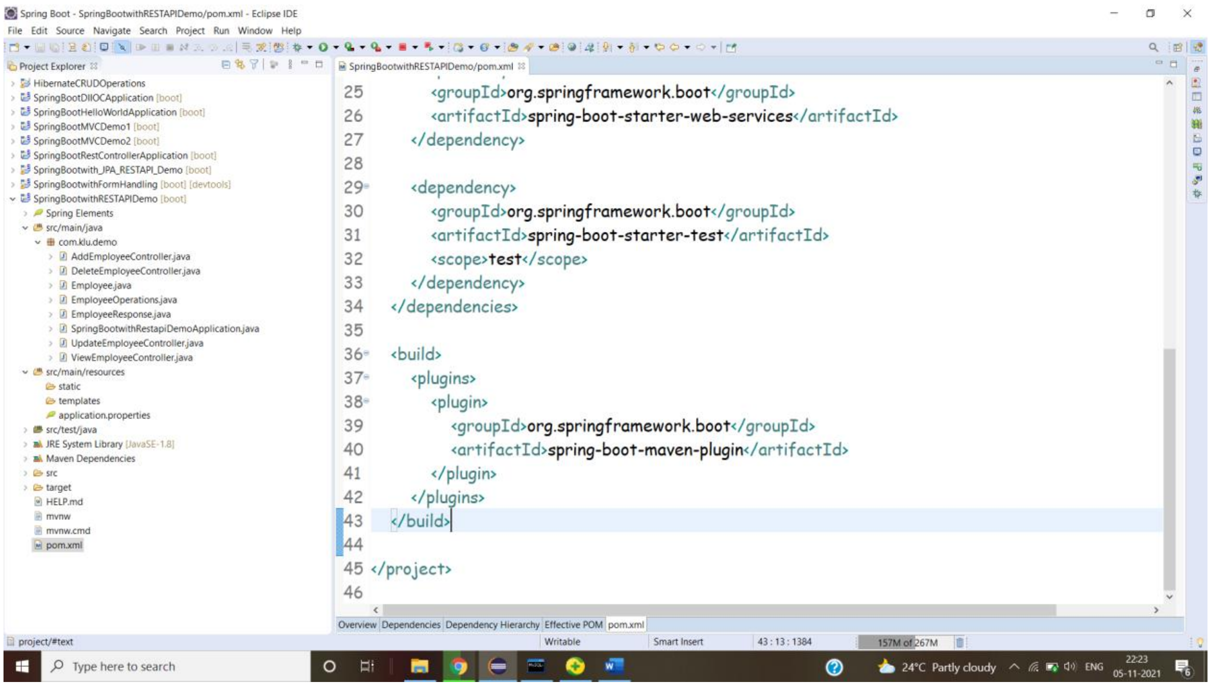
Spring Boot with Rest API

Pom.xml


Spring Boot - SpringBootwithRESTAPIDemo/pom.xml - Eclipse IDE
Project Explorer
SpringBootwithRESTAPIDemo/pom.xml
Overview Dependencies Dependency Hierarchy Effective POM pom.xml
Writable
Smart Insert
43 : 13 : 1384

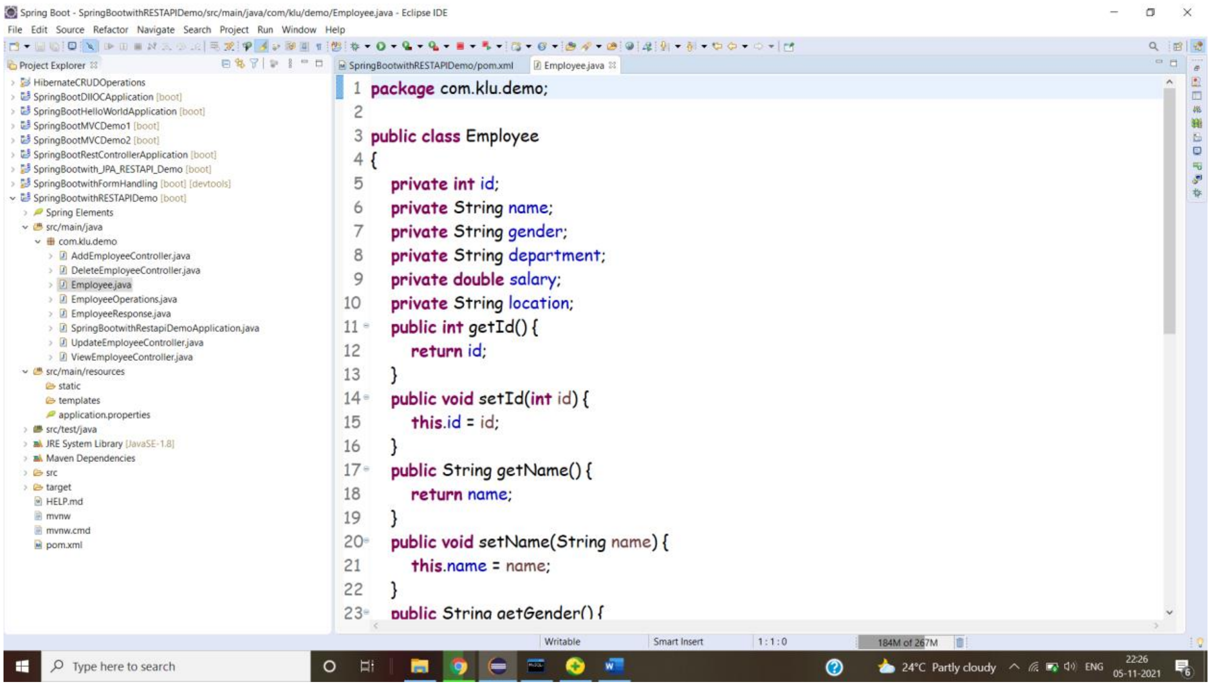
```xml
            <groupId>org.springframework.boot</groupId>
            <artifactId>spring-boot-starter-web-services</artifactId>
        </dependency>

        <dependency>
            <groupId>org.springframework.boot</groupId>
            <artifactId>spring-boot-starter-test</artifactId>
            <scope>test</scope>
        </dependency>
    </dependencies>

    <build>
        <plugins>
            <plugin>
                <groupId>org.springframework.boot</groupId>
                <artifactId>spring-boot-maven-plugin</artifactId>
            </plugin>
        </plugins>
    </build>

</project>
```

Employee.java


Spring Boot - SpringBootwithRESTAPIDemo/src/main/java/com/klu/demo/Employee.java - Eclipse IDE
Project Explorer
SpringBootwithRESTAPIDemo/pom.xml
Employee.java
Writable
Smart Insert
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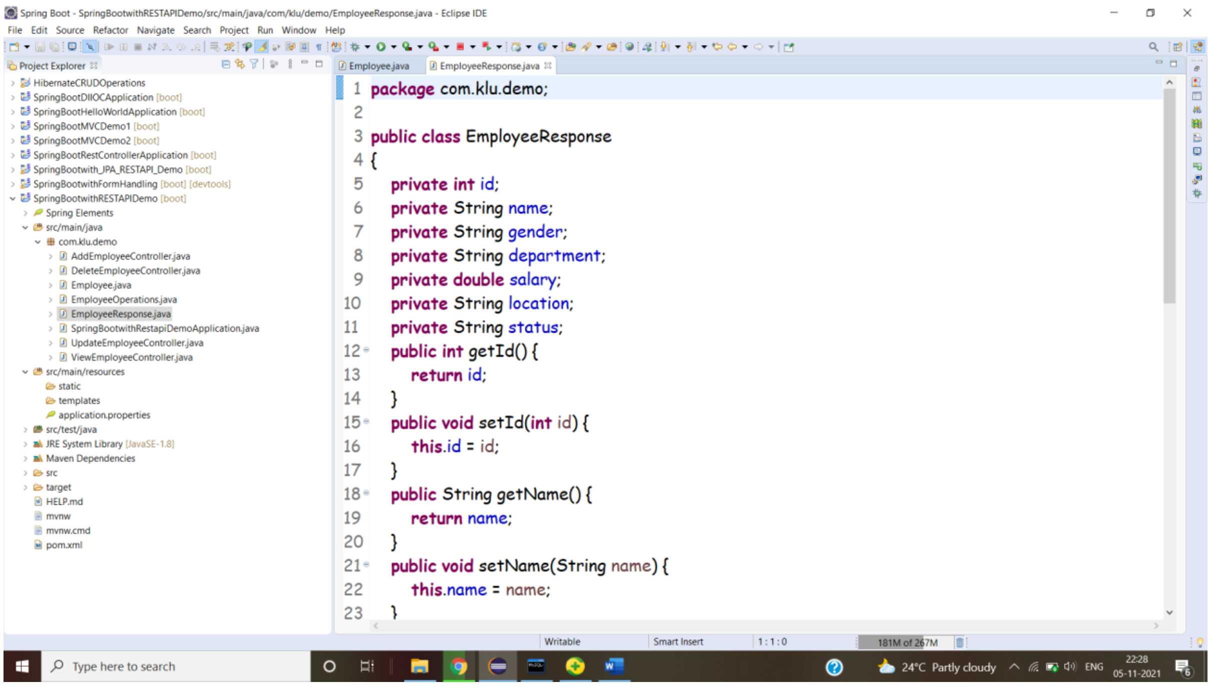
```java
package com.klu.demo;

public class Employee
{
    private int id;
    private String name;
    private String gender;
    private String department;
    private double salary;
    private String location;
    public int getId() {
        return id;
    }
    public void setId(int id) {
        this.id = id;
    }
    public String getName() {
        return name;
    }
    public void setName(String name) {
        this.name = name;
    }
    public String getGender() {
```

EmployeeResponse.java


Spring Boot - SpringBootwithRESTAPIDemo/src/main/java/com/klu/demo/EmployeeResponse.java - Eclipse IDE
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Project Explorer
HibernateCRUDOperations
SpringBootDIIOCApplication [boot]
SpringBootHelloWorldApplication [boot]
SpringBootMVCDemo1 [boot]
SpringBootMVCDemo2 [boot]
SpringBootRestControllerApplication [boot]
SpringBootwith_JPA_RESTAPI_Demo [boot]
SpringBootwithFormHandling [boot] [devtools]
SpringBootwithRESTAPIDemo [boot]
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src/main/java
com.klu.demo
AddEmployeeController.java
DeleteEmployeeController.java
Employee.java
EmployeeOperations.java
EmployeeResponse.java
SpringBootwithRestapiDemoApplication.java
UpdateEmployeeController.java
ViewEmployeeController.java
src/main/resources
static
templates
application.properties
src/test/java
JRE System Library [JavaSE-1.8]
Maven Dependencies
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HELP.md
mvnw
mvnw.cmd
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Employee.java
EmployeeResponse.java
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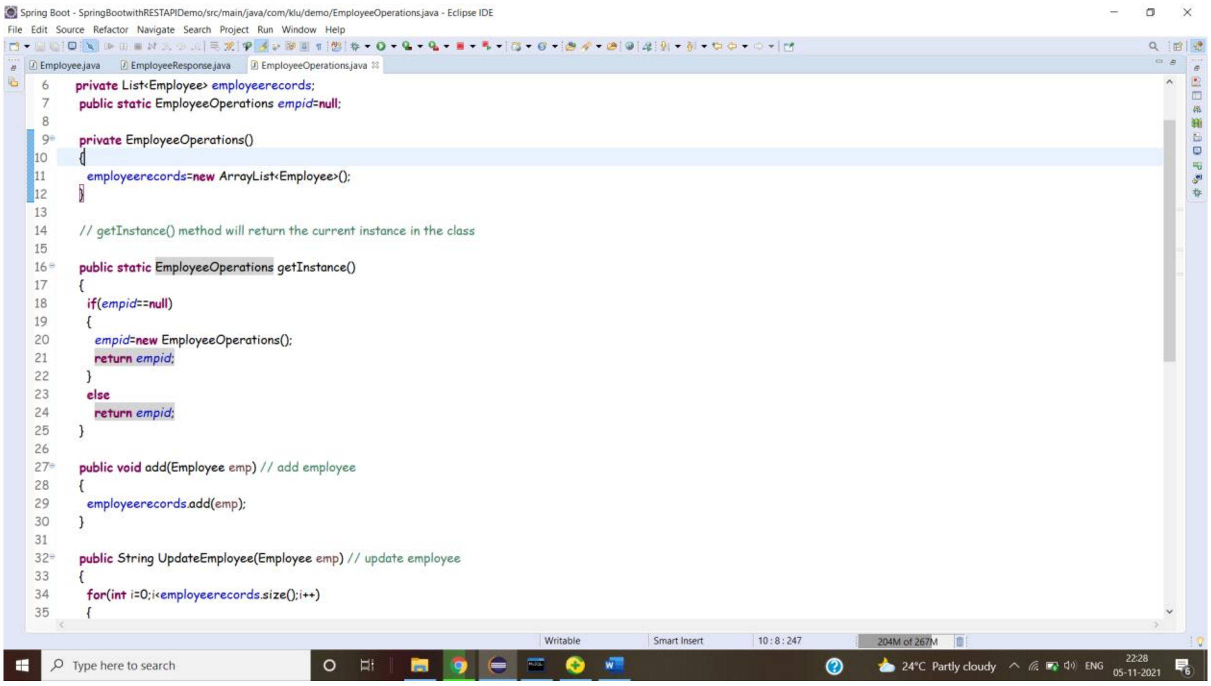
24°C Partly cloudy
ENG
22:28
05-11-2021

```java
package com.klu.demo;

public class EmployeeResponse
{
  private int id;
  private String name;
  private String gender;
  private String department;
  private double salary;
  private String location;
  private String status;
  public int getId() {
    return id;
  }
  public void setId(int id) {
    this.id = id;
  }
  public String getName() {
    return name;
  }
  public void setName(String name) {
    this.name = name;
  }
```

EmployeeOperations.java


Spring Boot - SpringBootwithRESTAPIDemo/src/main/java/com/klu/demo/EmployeeOperations.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Employee.java
EmployeeResponse.java
EmployeeOperations.java
Writable
Smart Insert
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204M of 267M
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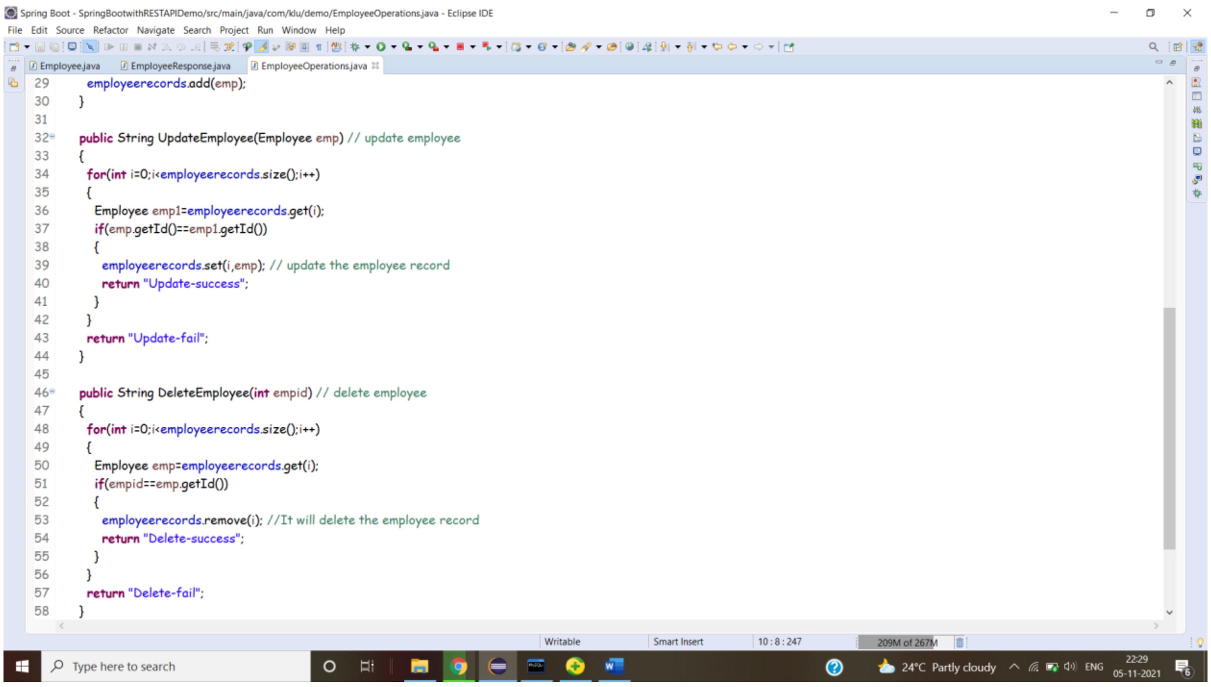
05-11-2021

```java
private List<Employee> employeerecords;
 public static EmployeeOperations empid=null;

 private EmployeeOperations()
 {
  employeerecords=new ArrayList<Employee>();
 }

 // getInstance() method will return the current instance in the class

 public static EmployeeOperations getInstance()
 {
  if(empid==null)
  {
   empid=new EmployeeOperations();
   return empid;
  }
  else
   return empid;
 }

 public void add(Employee emp) // add employee
 {
  employeerecords.add(emp);
 }

 public String UpdateEmployee(Employee emp) // update employee
 {
  for(int i=0;i<employeerecords.size();i++)
  {
```


Spring Boot - SpringBootwithRESTAPIDemo/src/main/java/com/klu/demo/EmployeeOperations.java - Eclipse IDE
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Employee.java
EmployeeResponse.java
EmployeeOperations.java
Writable
Smart Insert
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209M of 267M
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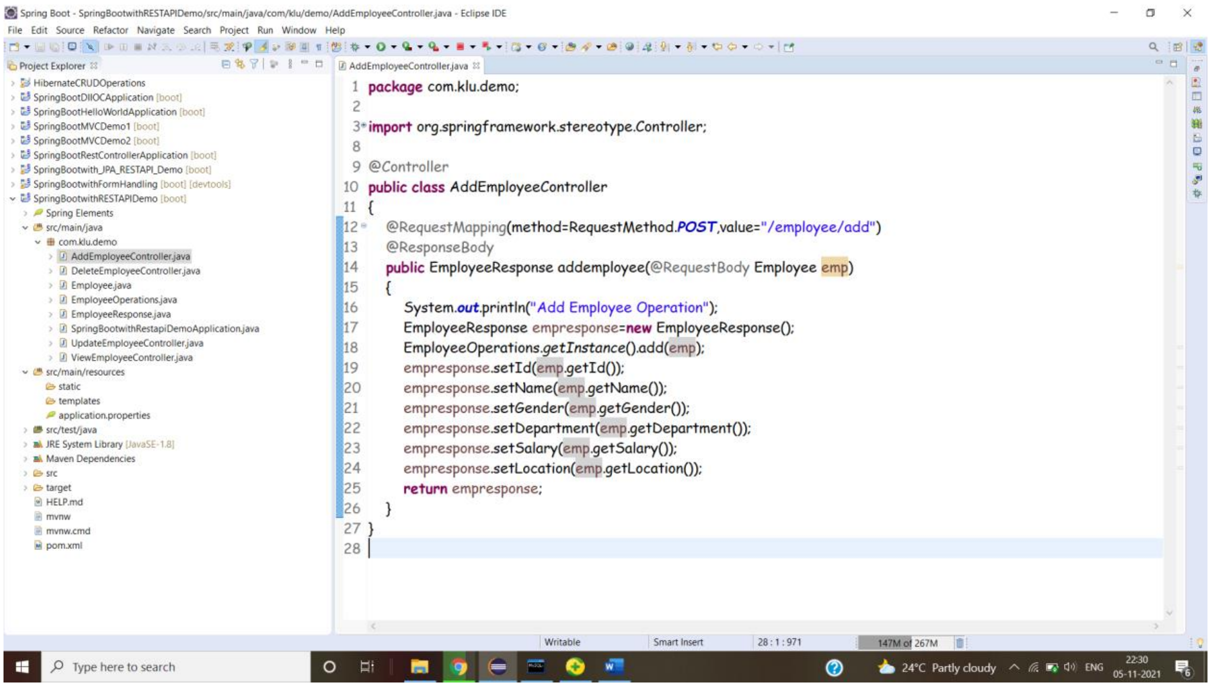
05-11-2021

```java
 employeerecords.add(emp);
}

public String UpdateEmployee(Employee emp) // update employee
{
 for(int i=0;i<employeerecords.size();i++)
 {
  Employee emp1=employeerecords.get(i);
  if(emp.getId()==emp1.getId())
  {
   employeerecords.set(i,emp); // update the employee record
   return "Update-success";
  }
 }
 return "Update-fail";
}

public String DeleteEmployee(int empid) // delete employee
{
 for(int i=0;i<employeerecords.size();i++)
 {
  Employee emp=employeerecords.get(i);
  if(empid==emp.getId())
  {
   employeerecords.remove(i); //It will delete the employee record
   return "Delete-success";
  }
 }
 return "Delete-fail";
}
```

AddEmployeeController.java


Spring Boot - SpringBootwithRESTAPIDemo/src/main/java/com/klu/demo/AddEmployeeController.java - Eclipse IDE
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Maven Dependencies
src
target
HELP.md
mvnw
mvnw.cmd
pom.xml
AddEmployeeController.java
Writable
Smart Insert
28 : 1 : 971
147M of 267M
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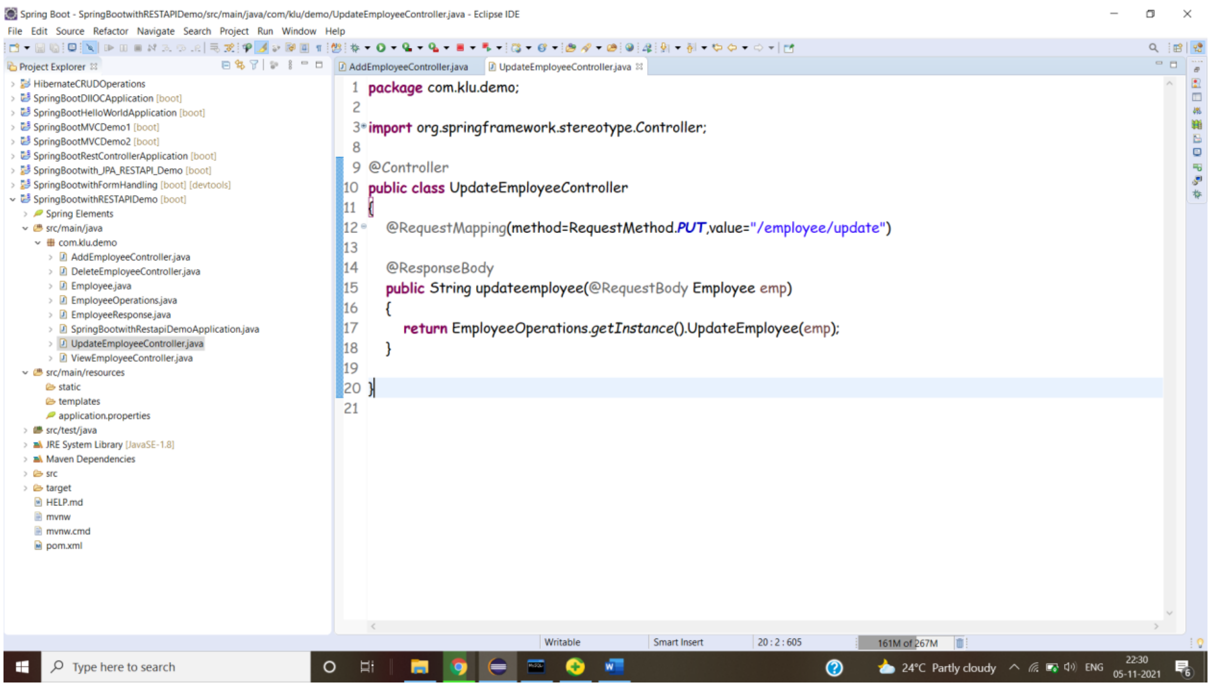
05-11-2021

```java
package com.klu.demo;

import org.springframework.stereotype.Controller;

@Controller
public class AddEmployeeController
{
	@RequestMapping(method=RequestMethod.POST,value="/employee/add")
	@ResponseBody
	public EmployeeResponse addemployee(@RequestBody Employee emp)
	{
		System.out.println("Add Employee Operation");
		EmployeeResponse empresponse=new EmployeeResponse();
		EmployeeOperations.getInstance().add(emp);
		empresponse.setId(emp.getId());
		empresponse.setName(emp.getName());
		empresponse.setGender(emp.getGender());
		empresponse.setDepartment(emp.getDepartment());
		empresponse.setSalary(emp.getSalary());
		empresponse.setLocation(emp.getLocation());
		return empresponse;
	}
}
```

UpdateEmployeeController.java


Spring Boot - SpringBootwithRESTAPIDemo/src/main/java/com/klu/demo/UpdateEmployeeController.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
AddEmployeeController.java
UpdateEmployeeController.java
Writable
Smart Insert
20 : 2 : 605
161M of 267M
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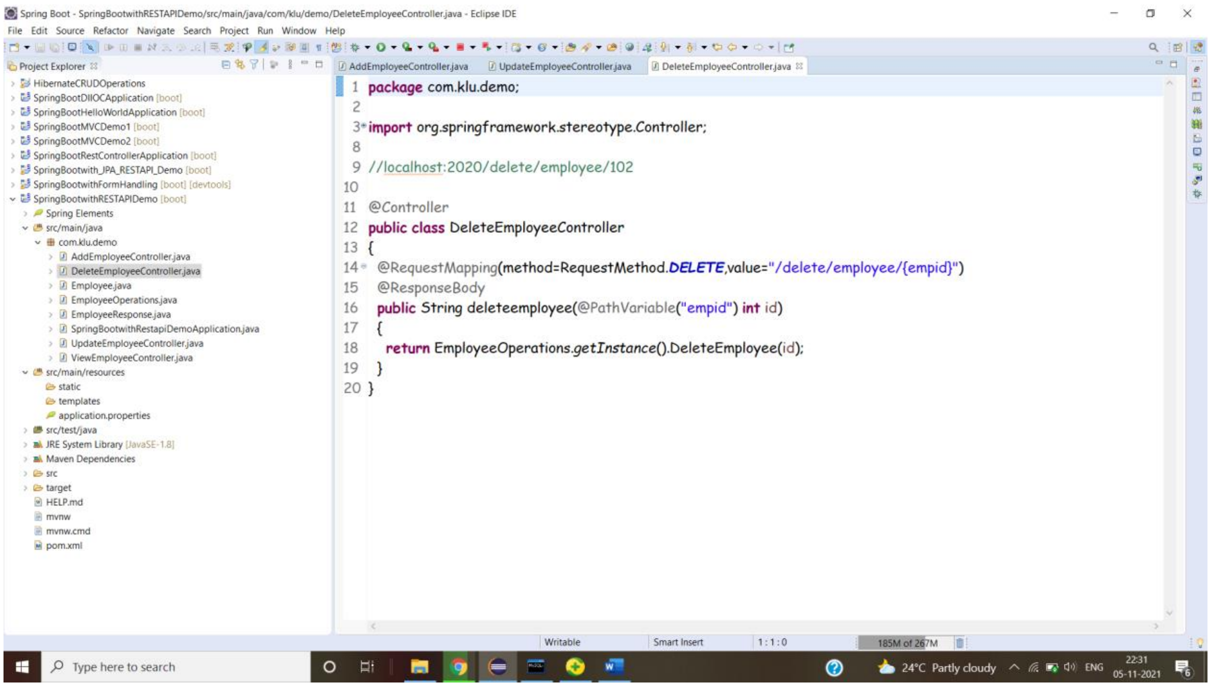
ENG
22:30
05-11-2021

```java
package com.klu.demo;

import org.springframework.stereotype.Controller;

@Controller
public class UpdateEmployeeController
{
  @RequestMapping(method=RequestMethod.PUT,value="/employee/update")

  @ResponseBody
  public String updateemployee(@RequestBody Employee emp)
  {
    return EmployeeOperations.getInstance().UpdateEmployee(emp);
  }

}
```

DeleteEmployeeController.java


Spring Boot - SpringBootwithRESTAPIDemo/src/main/java/com/klu/demo/DeleteEmployeeController.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
AddEmployeeController.java
UpdateEmployeeController.java
DeleteEmployeeController.java
Writable
Smart Insert
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05-11-2021

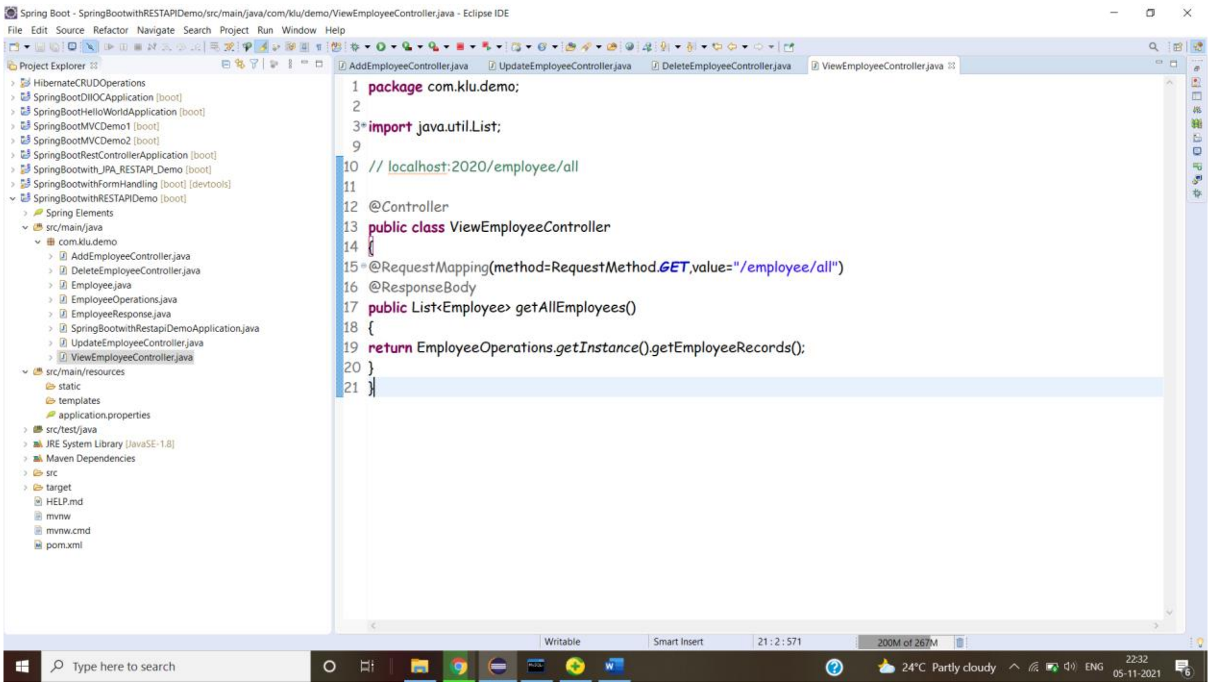
```java
package com.klu.demo;

import org.springframework.stereotype.Controller;

//localhost:2020/delete/employee/102

@Controller
public class DeleteEmployeeController
{
 @RequestMapping(method=RequestMethod.DELETE,value="/delete/employee/{empid}")
 @ResponseBody
 public String deleteemployee(@PathVariable("empid") int id)
 {
   return EmployeeOperations.getInstance().DeleteEmployee(id);
 }
}
```

ViewEmployeController.java



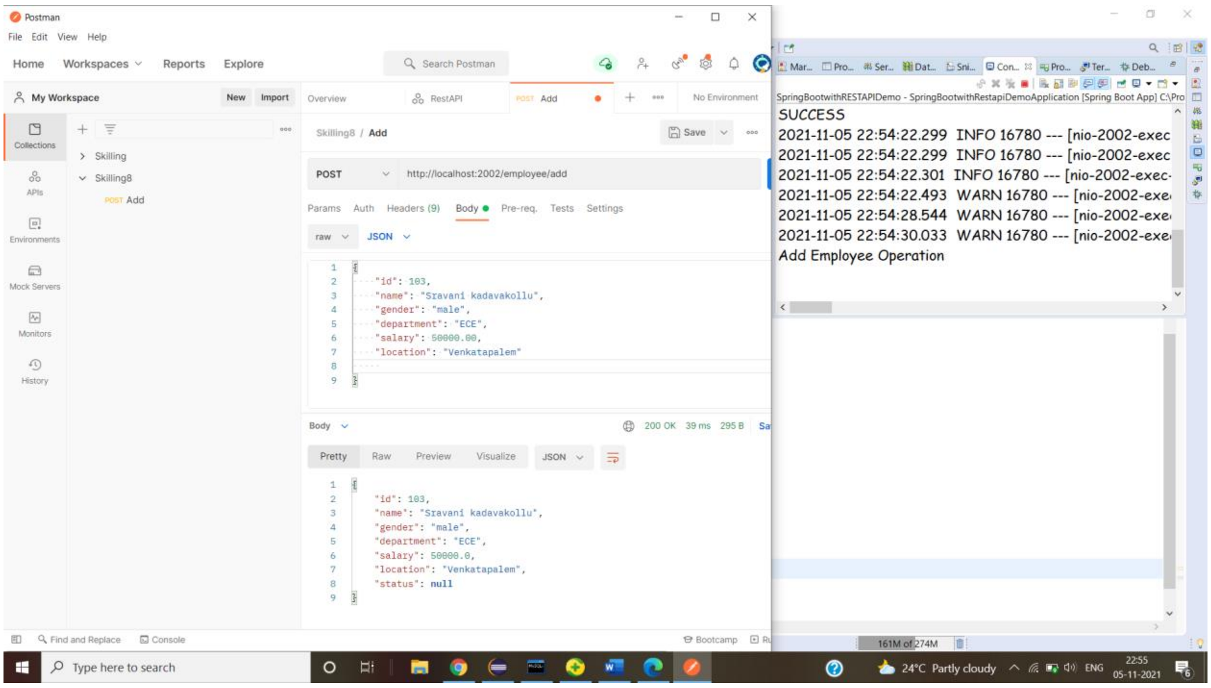
```java
package com.klu.demo;

import java.util.List;

// localhost:2020/employee/all

@Controller
public class ViewEmployeeController
{
@RequestMapping(method=RequestMethod.GET,value="/employee/all")
@ResponseBody
public List<Employee> getAllEmployees()
{
return EmployeeOperations.getInstance().getEmployeeRecords();
}
}
```

Add employee:



POST http://localhost:2002/employee/add

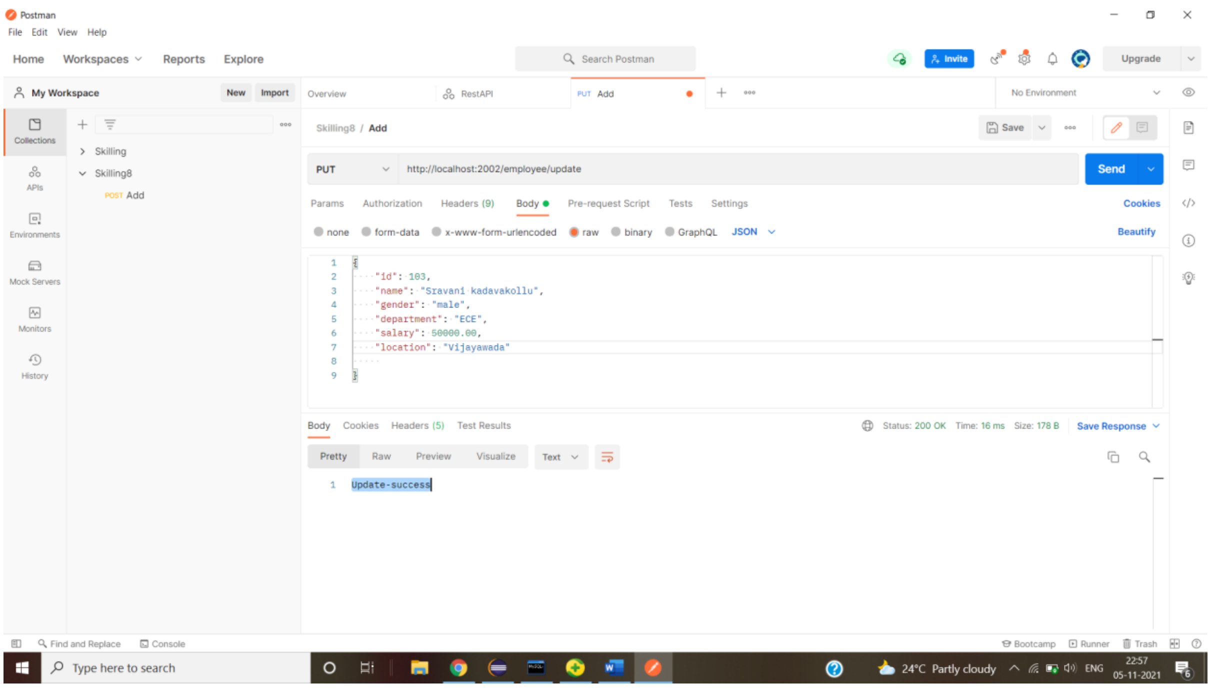
```
{
    "id": 103,
    "name": "Sravani kadavakollu",
    "gender": "male",
    "department": "ECE",
    "salary": 50000.00,
    "location": "Venkatapalem"
    
}
```

200 OK 39 ms 295 B

```
{
    "id": 103,
    "name": "Sravani kadavakollu",
    "gender": "male",
    "department": "ECE",
    "salary": 50000.0,
    "location": "Venkatapalem",
    "status": null
}
```

```
SpringBootwithRESTAPIDemo - SpringBootwithRestapiDemoApplication [Spring Boot App] C:\Pro
SUCCESS
2021-11-05 22:54:22.299  INFO 16780 --- [nio-2002-exec
2021-11-05 22:54:22.299  INFO 16780 --- [nio-2002-exec
2021-11-05 22:54:22.301  INFO 16780 --- [nio-2002-exec-
2021-11-05 22:54:22.493  WARN 16780 --- [nio-2002-exe
2021-11-05 22:54:28.544  WARN 16780 --- [nio-2002-exe
2021-11-05 22:54:30.033  WARN 16780 --- [nio-2002-exe
Add Employee Operation
```

Update Employee:



PUT http://localhost:2002/employee/update

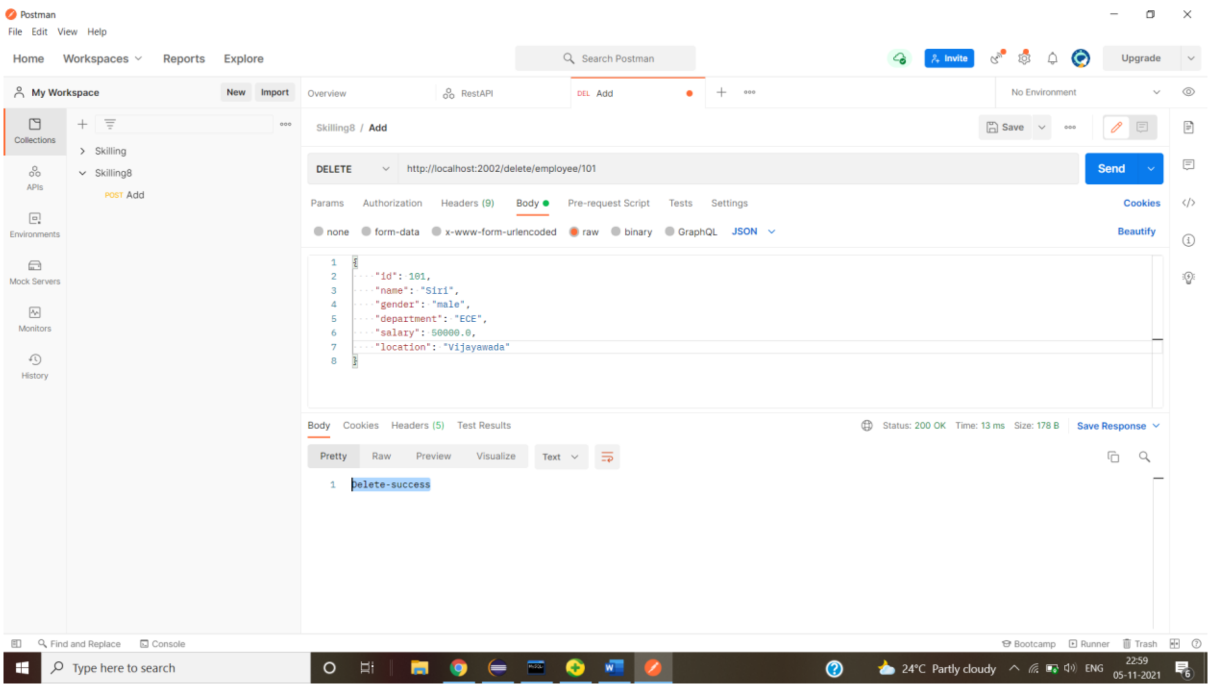
Body: raw, JSON

```
{
    "id": 103,
    "name": "Sravani kadavakollu",
    "gender": "male",
    "department": "ECE",
    "salary": 50000.00,
    "location": "Vijayawada"
    
}
```

Status: 200 OK Time: 16 ms Size: 178 B

```
Update-success
```

Delete Employee:



DELETE http://localhost:2002/delete/employee/101

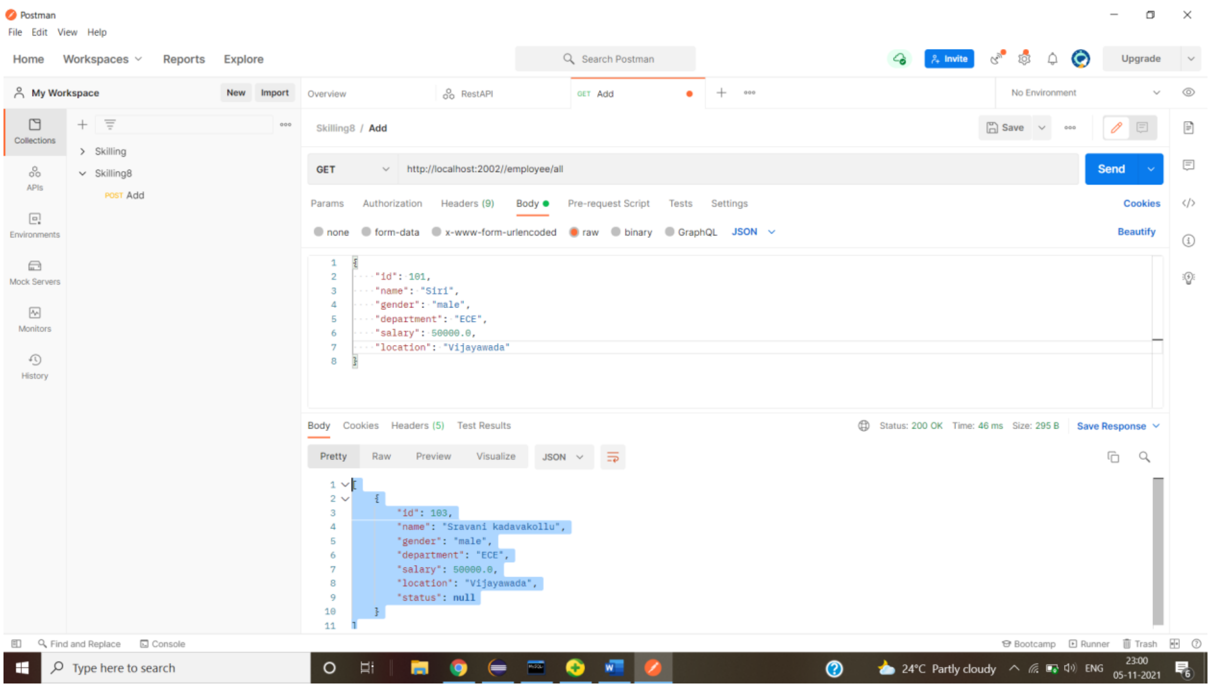
Body: raw, JSON

```
{
    "id": 101,
    "name": "Siri",
    "gender": "male",
    "department": "ECE",
    "salary": 50000.0,
    "location": "Vijayawada"
}
```

Status: 200 OK Time: 13 ms Size: 178 B

```
Delete-success
```

View Employee:



GET http://localhost:2002//employee/all

Status: 200 OK Time: 46 ms Size: 295 B

```
{
    "id": 101,
    "name": "Siri",
    "gender": "male",
    "department": "ECE",
    "salary": 50000.0,
    "location": "Vijayawada"
}
```

```
[
    {
        "id": 103,
        "name": "Sravani kadavakollu",
        "gender": "male",
        "department": "ECE",
        "salary": 50000.0,
        "location": "Vijayawada",
        "status": null
    }
]
```