

RESTAPI-1

1.personcontroller:

```
package com.example;
```

```
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.web.bind.annotation.PathVariable;
import org.springframework.web.bind.annotation.RequestBody;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestMethod;
import org.springframework.web.bind.annotation.RestController;

@RestController
@RequestMapping(path = "/webapione")
public class PersonController {
```

```
    @Autowired
```

```
    PersonService personService;
```

```
    @RequestMapping("/person/{personId}")
```

```
    public PersonResonse getPerson(@PathVariable int personId){
        return personService.getPerson(personId);
    }
```

```
    @RequestMapping(method=RequestMethod.POST, value="/person")
```

```
    public void addPerson(@RequestBody PersonEntity pe ) {
        personService.addPerson(pe);
    }
```

```
}
```

2.personentity:

```
package com.example;
```

```
import jakarta.persistence.Column;
```

```
import jakarta.persistence.Entity;
```

```
import jakarta.persistence.GeneratedValue;
```

```
import jakarta.persistence.GenerationType;
```

```
import jakarta.persistence.Id;
```

```
@Entity
```

```
public class PersonEntity {
```

```
    @Id
```

```
    @GeneratedValue(strategy = GenerationType.AUTO)
```

```
    @Column(name = "id", updatable = false, nullable = false)
```

```
    private Integer personId;
```

```
    @Column
```

```
    private String name;
```

```
    @Column
```

```
    private Integer age;
```

```
    public PersonEntity() {
```

```
        super();
```

```
    }
```

```
    public PersonEntity(Integer personId, String name, Integer age) {
```

```
    super();  
    this.personId = personId;  
    this.name = name;  
    this.age = age;  
}  
public Integer getPersonId() {  
    return personId;  
}  
public void setPersonId(Integer personId) {  
    this.personId = personId;  
}  
public String getName() {  
    return name;  
}  
public void setName(String name) {  
    this.name = name;  
}  
public Integer getAge() {  
    return age;  
}  
public void setAge(Integer age) {  
    this.age = age;  
}  
}
```

3. Personrepository

```
package com.example;
```

```
import org.springframework.data.jpa.repository.JpaRepository;
```

```
import org.springframework.stereotype.Repository;
```

```
@Repository
```

```
public interface PersonRepository extends JpaRepository<PersonEntity,  
Integer> {  
  
}
```

4. personresonse:

```
package com.example;
```

```
public class PersonResonse {  
    private Integer personId;  
    private String name;  
    private Integer age;  
    private String hobby;  
    public Integer getPersonId() {  
        return personId;  
    }  
    public void setPersonId(Integer personId) {  
        this.personId = personId;  
    }  
    public String getName() {  
        return name;  
    }  
    public void setName(String name) {  
        this.name = name;  
    }  
    public Integer getAge() {  
        return age;  
    }  
    public void setAge(Integer age) {  
        this.age = age;  
    }  
    public String getHobby() {  
        return hobby;  
    }  
    public void setHobby(String result) {  
        this.hobby = result;  
    }  
}
```

5.personservice:

```
package com.example;
```

```
import java.util.HashMap;
```

```
import java.util.Map;
```

```
import org.springframework.stereotype.Service;
```

```
import org.springframework.beans.factory.annotation.Autowired;
```

```
import org.springframework.web.client.RestTemplate;
```

```
@Service
```

```
public class PersonService {
```

```
    @Autowired
```

```
    PersonRepository personRepository;
```

```
    RestTemplate restTemplate = new RestTemplate();
```

```
    public PersonResonse getPerson(int personId){
```

```
        final String uri = "http://localhost:8082/webapitwo/hobby/{personId}";
```

```
        Map<String, Integer> params = new HashMap<String, Integer>();
```

```
        params.put("personId", personId);
```

```
        String result = restTemplate.getForObject(uri, String.class, params);
```

```
        PersonEntity pe=personRepository.findById(personId).get();
```

```
        PersonResonse pr=new PersonResonse();
```

```
        pr.setPersonId(pe.getPersonId());
```

```

        pr.setName(pe.getName());
        pr.setAge(pe.getAge());
        pr.setHobby(result);

        return pr;
    }

    public void addPerson(PersonEntity pe){
        personRepository.save(pe);
    }
}

```

5.

```
package com.example;
```

```

import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication
public class Restapi1Application {

    public static void main(String[] args) {

        SpringApplication.run(Restapi1Application.class, args);

    }
}

```

6.application.properties

```

server.port=8081
spring.application.name=RestApiOne

```

RESTAPI-2

1.hobbycontroller;

package com.example;

import org.springframework.beans.factory.annotation.Autowired;

import org.springframework.web.bind.annotation.PathVariable;

import org.springframework.web.bind.annotation.RequestBody;

import org.springframework.web.bind.annotation.RequestMapping;

import org.springframework.web.bind.annotation.RequestMethod;

import org.springframework.web.bind.annotation.RestController;

@RestController

@RequestMapping(path = "/webapitwo")

public class HobbyController {

 @Autowired

 HobbyService hobbyService;

 @RequestMapping("/hobby/{personid}")

 public String findByPersonId(@PathVariable int personid){

 return hobbyService.findByPersonId(personid);

 }

 @RequestMapping(method=RequestMethod.POST, value="/hobby")

 public void addHobby(@RequestBody HobbyEntity he) {

```
        hobbyService.addHobby(he);
    }

}
```

2.hobbyentity:

```
package com.example;
```

```
import jakarta.persistence.Column;
import jakarta.persistence.Entity;
import jakarta.persistence.GeneratedValue;
import jakarta.persistence.GenerationType;
import jakarta.persistence.Id;
```

```
@Entity
```

```
public class HobbyEntity {
```

```
    @Id
```

```
    @GeneratedValue(strategy = GenerationType.AUTO)
```

```
    @Column(name = "id", updatable = false, nullable = false)
```

```
    private Integer id;
```

```
    @Column
```

```
    private Integer personId;
```

```
    @Column
```



```
private String name;

public HobbyEntity() {
    super();
}

public HobbyEntity(Integer personId, String name) {
    super();
    this.personId = personId;
    this.name = name;
}

public Integer getPersonId() {
    return personId;
}

public void setPersonId(Integer personId) {
    this.personId = personId;
}

public String getName() {
    return name;
}

public void setName(String name) {
    this.name = name;
}
}
```

3.hobbyrepository:

```
package com.example;
```

```
import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.data.jpa.repository.Query;
import org.springframework.stereotype.Repository;

@Repository

public interface HobbyRepository extends JpaRepository<HobbyEntity, Integer>
{

    @Query("SELECT h.name FROM HobbyEntity h WHERE
h.personId=:personId")
    public String findByPersonId(Integer personId);
}
```

4.hobbyservice:

```
package com.example;
```

```
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;
```

```
@Service
```

```
public class HobbyService {
```

```
    @Autowired
```

```
    HobbyRepository hobbyRepository;
```

```
    public String findByPersonId(int personid){
```

```
        return hobbyRepository.findByPersonId(personid);
    }
    public void addHobby(HobbyEntity he){
        hobbyRepository.save(he);
    }
}
```

5. package com.example;

```
import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;
```

```
@SpringBootApplication
```

```
public class Restapi2Application {
```

```
    public static void main(String[] args) {
        SpringApplication.run(Restapi2Application.class, args);
    }
}
```

6.application.properties:

```
server.port=8082
spring.application.name=RestApiTwo
```

OUTPUT:

The screenshot displays the Postman application interface. At the top, the 'Overview' tab is active, showing a GET request to `http://localhost:8081/webapi/person/1`. The request is saved in a collection named 'http://localhost:8081/webapi/person/1'. The 'Body' tab is selected, showing the request body in JSON format:

```
1 {
2   "personId": 1,
3   "name": "badminton"
4 }
```

The response is displayed in the 'Body' tab, showing a status of 200 OK, a time of 1208 ms, and a size of 221 B. The response body is in JSON format:

```
1 {
2   "personId": 1,
3   "name": "john",
4   "age": 23,
5   "hobby": "badminton"
6 }
```

The Windows taskbar at the bottom shows the system clock as 12:27 on 02-08-2023, with a temperature of 23°C and weather 'Mostly sunny'.