

ASSISTED PROJECT :

RestApiOne

Main Class :

```
package com.example.test;
import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;
@SpringBootApplication
public class RestApiOneApplication {
    public static void main(String[] args) {
        SpringApplication.run(RestApiOneApplication.class, args);
    }
}
```

Entity Class :

```
package com.example.test;
import javax.persistence.Column;
import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.GenerationType;
import javax.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;
    }
}

```

Repository Class :

```

package com.example.test;
import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.stereotype.Repository;
@Repository
public interface PersonRepository extends JpaRepository<PersonEntity, Integer> {
}

```

Service Class :

```

package com.example.test;
import java.util.HashMap;
import java.util.Map;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;
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);
    }
}

```

Controller Class :

```

package com.example.test;
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 PersonControlller {
    @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);
    }
}

```

Response Class :

```

package com.example.test;
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;
    }
}

```

Port Number :

```

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

```

RestApiTwo

Main Method :

```

package com.example.test;
import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;
@SpringBootApplication
public class RestApiTwoApplication {
    public static void main(String[] args) {
SpringApplication.run(RestApiTwoApplication.class, args);
    }
}

```

Entity Class :

```

package com.example.test;
import javax.persistence.Column;
import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.GenerationType;
import javax.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;
    }
}

```

Repository Class :

```

package com.example.test;
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);
}

```

Service Class :

```

package com.example.test;
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);
    }
}

```

Controller Class :

```

package com.example.test;
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);
}
}
```

Port Number :

server.port=8081

spring.application.name=RestApiTwo