Create a project to demonstrate microservices with Spring Boot

```java
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);

     }


}
```

```java
package com.example.test;


import javax.persistence.Column;

import javax.persistence.Entity;

import javax.persistence.GeneratedValue;

import javax.persistence.GenerationType;
```

```java
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;
```

```java
    }

    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;

    }
}
```

```java
package com.example.test;


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

import org.springframework.stereotype.Repository;


@Repository

public interface PersonRepository extends JpaRepository<PersonEntity, Integer>
{


}
```

```java
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 {
```

```java
@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;
}
```

```java
    public void addPerson(PersonEntity pe){

    personRepository.save(pe);

    }

}
```

```java
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;
```

```java
@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);

    }
}
```

```java
package com.example.test;


public class PersonResonse {


    private Integer personId;

    private String name;

    private Integer age;

    private String hobby;

    public Integer getPersonId() {

    return personId;
```

```java
    }

    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;

    }
```

}

---

server.port=8081

spring.application.name=RestApiOne

---

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);

    }

}

```java
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() {
```

```java
        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;

    }

}
```

```java
package com.example.test;
```

```java
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);


}
```

```java
package com.example.test;


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

import org.springframework.stereotype.Service;


@Service

public class HobbyService {


    @Autowired
```

```java
    HobbyRepository hobbyRepository;


    public String findByPersonId(int personid){

    return hobbyRepository.findByPersonId(personid);

    }

    public void addHobby(HobbyEntity he){

    hobbyRepository.save(he);

    }

}
```

```java
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")
```

```java
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);

    }


}
```

```
server.port=8082

spring.application.name=RestApiTwo
```