**RestApiOneApplication**

**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;

}

}

**Creating another project with the name ‘RestApiTwo’**

**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);

}

}