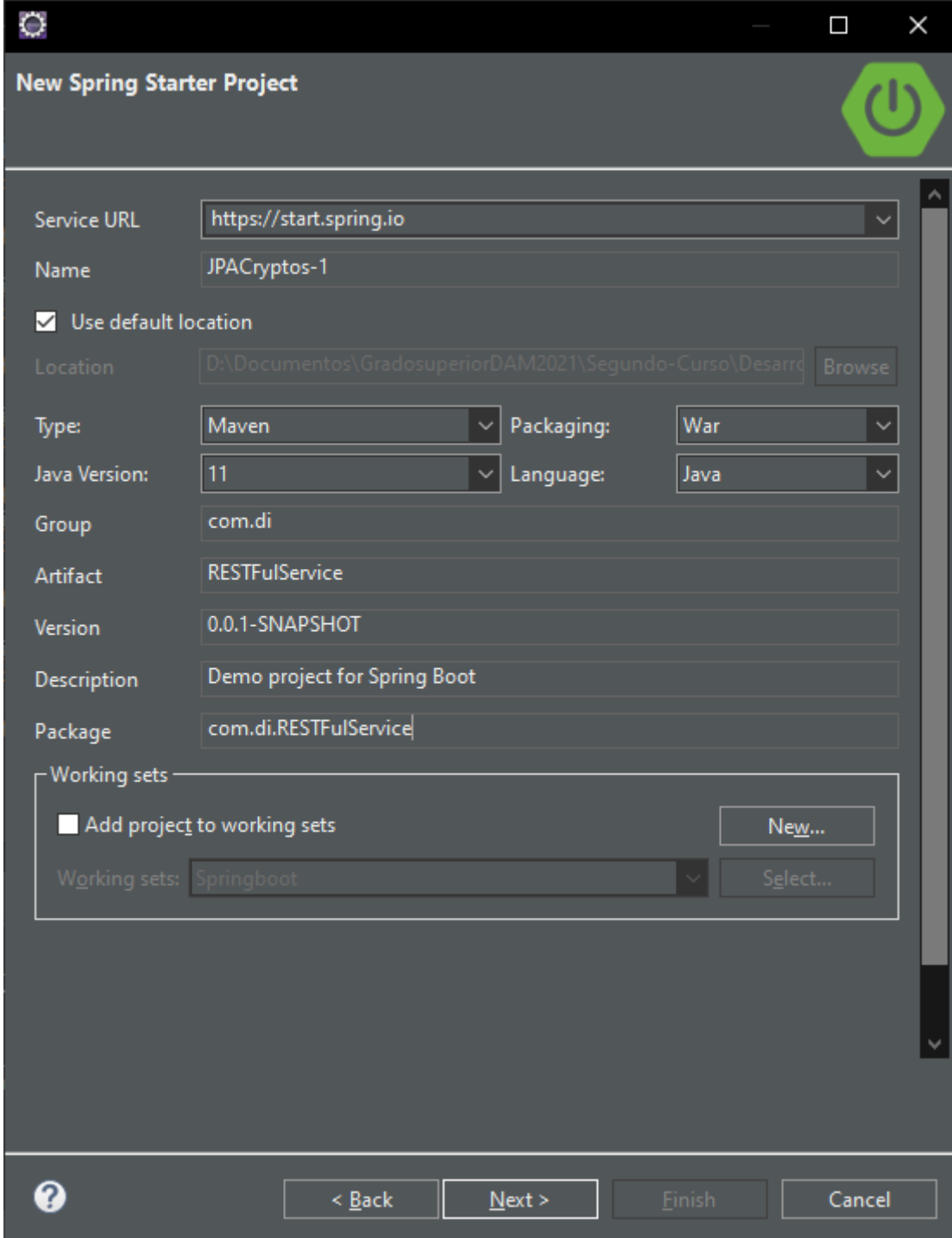


B5 A1 RESTFul Service

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2º H-V

Creamos un nuevo proyecto SpringBoot



The screenshot shows the 'New Spring Starter Project' dialog box in the Eclipse IDE. The dialog has a dark theme and a green power button icon in the top right corner. The fields are as follows:

- Service URL: `https://start.spring.io`
- Name: `JPACryptos-1`
- ☒ Use default location
- Location: `D:\Documentos\GradosuperiorDAM2021\Segundo-Curso\Desarrollo` (with a 'Browse' button)
- Type: `Maven` (dropdown)
- Packaging: `War` (dropdown)
- Java Version: `11` (dropdown)
- Language: `Java` (dropdown)
- Group: `com.di`
- Artifact: `RESTFulService`
- Version: `0.0.1-SNAPSHOT`
- Description: `Demo project for Spring Boot`
- Package: `com.di.RESTFulService`

Below these fields is a 'Working sets' section with a checkbox ☐ 'Add project to working sets' and a 'New...' button. Below that, 'Working sets:' is set to 'Springboot' with a 'Select...' button.

At the bottom, there is a question mark icon and four buttons: '< Back', 'Next >', 'Finish', and 'Cancel'.

Creamos la clase objeto Greeting

```
1 package com.di.RESTFulService.entity;
2
3 public class Greeting {
4
5     private String player;
6     private String message;
7
8     public Greeting(String player, String message) {
9         this.player = player;
10        this.message = message;
11    }
12
13    public String getPlayer() {
14        return player;
15    }
16
17    public void setPlayer(String player) {
18        this.player = player;
19    }
20
21    public String getMessage() {
22        return message;
23    }
24
25    public void setMessage(String message) {
26        this.message = message;
27    }
28 }
```

Creamos la clase objeto Widget

```
1 package com.di.RESTFulService.entity;
2
3 import java.util.ArrayList;
4
5
6 public class Widget {
7
8     private List<Greeting> greetings;
9     private String name;
10
11     public Widget() {
12         this.name = "name";
13         this.greetings = new ArrayList<>();
14     }
15
16     public Widget(List<Greeting> greetings) {
17         super();
18         this.greetings = greetings;
19     }
20
21     public String getName() {
22         return name;
23     }
24
25     public void setName(String name) {
26         this.name = name;
27     }
28
29     public List<Greeting> getGreetings() {
30         return greetings;
31     }
32
33     public void setGreetings(List<Greeting> greetings) {
34         this.greetings = greetings;
35     }
36
37 }
```

Creamos un repositorio simulado:

```
1 package com.di.RESTFulService.dao;
2
3 import java.util.ArrayList;
4
5
6
7
8
9
10 @Component
11 public class IWidgetDao {
12
13     private List<Greeting> greetings = new ArrayList<>();
14
15     public List<Greeting> getAllGreetings(){
16         greetings.add(new Greeting("player1","Hola"));
17         greetings.add(new Greeting("player2","cómo"));
18         greetings.add(new Greeting("player3","estás"));
19         greetings.add(new Greeting("player4","este"));
20         greetings.add(new Greeting("player5","día"));
21         greetings.add(new Greeting("player6","invernoso"));
22         greetings.add(new Greeting("player7","azul"));
23         greetings.add(new Greeting("player8","y amarillo."));
24         return greetings;
25     }
26
27 }
28
```

Creamos una interfaz del servicio

```
1 package com.di.RESTFulService.service;
2
3 import java.util.List;
4
5
6
7
8
9 @Service
10 public interface IWidgetService {
11
12     List<Greeting> getAllGreetings();
13
14 }
15
```

Una implementación del servicio:

```
1 package com.di.RESTFulService.service;
2
3 import java.util.List;
4
5 import org.springframework.beans.factory.annotation.Autowired;
6 import org.springframework.stereotype.Service;
7
8 import com.di.RESTFulService.dao.IWidgetDao;
9 import com.di.RESTFulService.entity.Greeting;
10
11 @Service
12 public class WidgetServiceImpl implements IWidgetService{
13
14     @Autowired
15     private IWidgetDao widgetDao;
16
17     @Override
18     public List<Greeting> getAllGreetings(){
19         return widgetDao.getAllGreetings();
20     }
21
22 }
23
```

Por último creamos un controlador

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

import com.di.RESTFulService.entity.Widget;
import com.di.RESTFulService.service.IWidgetService;

@RestController
@RequestMapping("/api")
public class BaseController {

    @Autowired
    private IWidgetService widgetService;

    @RequestMapping("/")
    public String welcome() { //Welcome page, non-rest
        return "Welcome to RestTemplate Example.";
    }

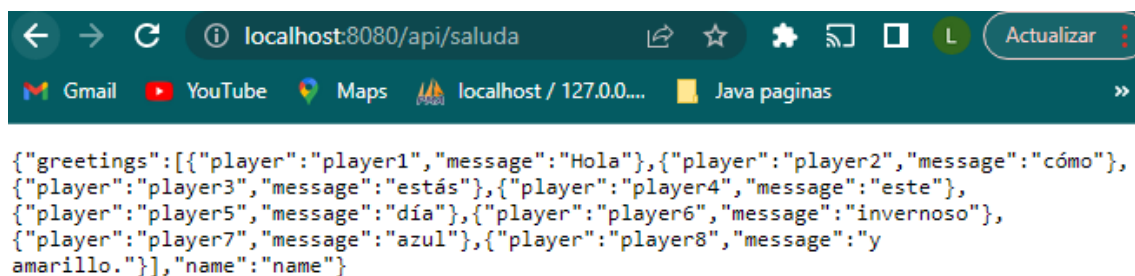
    @RequestMapping("/saluda")
    public Widget message() {

        Widget widget = new Widget();
        widget.setGreetings(widgetService.getAllGreetings());
        return widget;
    }

    @RequestMapping("/saluda/{name}")
    public Widget message2(@PathVariable String name) {

        Widget widget = new Widget();
        widget.setName(name);
        widget.setGreetings(widgetService.getAllGreetings());
        return widget;
    }
}
```

Resultado:



```
{
  "greetings": [
    { "player": "player1", "message": "Hola" },
    { "player": "player2", "message": "cómo" },
    { "player": "player3", "message": "estás" },
    { "player": "player4", "message": "este" },
    { "player": "player5", "message": "día" },
    { "player": "player6", "message": "invernoso" },
    { "player": "player7", "message": "azul" },
    { "player": "player8", "message": "y amarillo." }
  ],
  "name": "name"
}
```