Spring Boot(camp)

Getting started for the real world

SENACOR

Spring-Boot in a Nutshell

Rob Winch
@rob_winch

```
@Controller
class ThisWillActuallyRun {
    @RequestMapping("/")
    @ResponseBody
    String home() {
        "Hello World!"
    }
}
```

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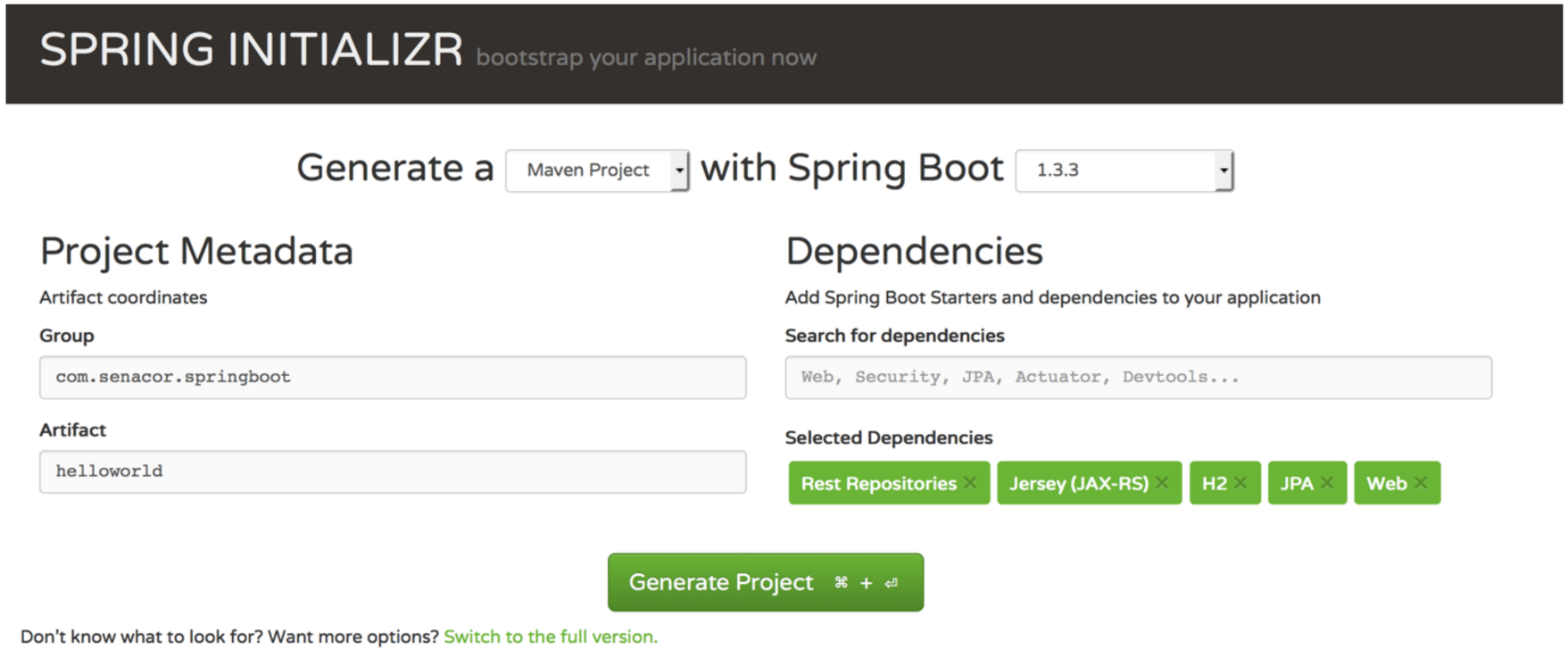
Demo - Hello World REST



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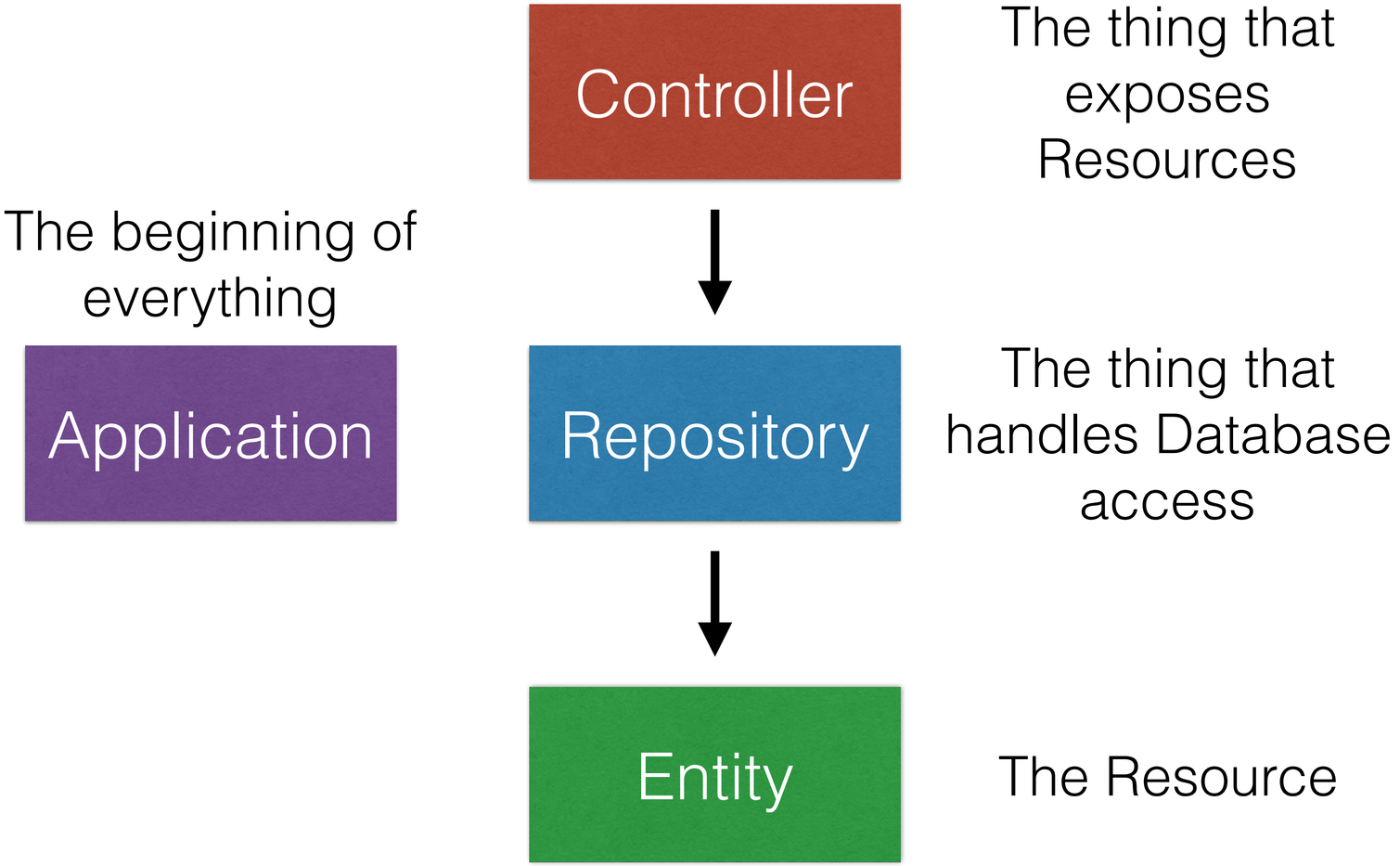
Demo - Main Concepts



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Demo - Hello World REST

```java
@SpringBootApplication
public class HelloworldApplication {

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

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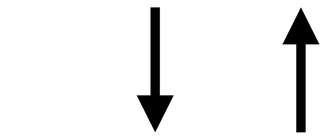
Application

Demo - Hello World REST

```java
@Entity
public class HelloWorld {
    @Id
    @GeneratedValue
    @JsonIgnore
    private String id;

    // boilerplate...
```



Database

Entity

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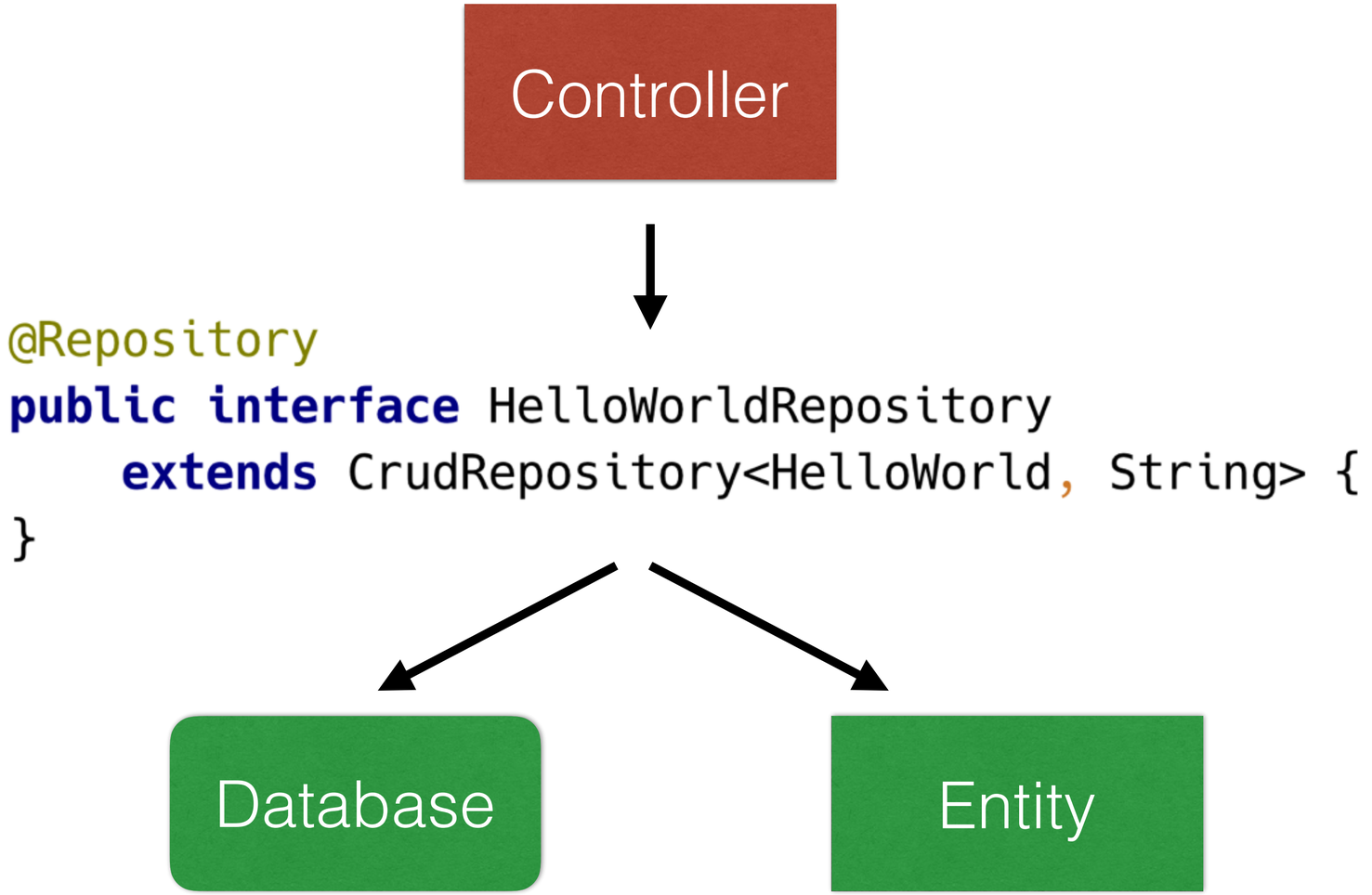
Demo - Hello World REST



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Repository

Demo - Hello World REST

$ curl http://localhost:8080/**helloworld**/

```
@RestController
@RequestMapping(
    path = "helloworld",
    produces = APPLICATION_JSON_UTF8_VALUE)
public class HelloWorldController {
    @Inject
    private HelloWorldRepository helloWorldRepository;
```

Repository

Controller

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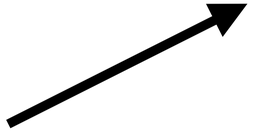
Demo - Hello World REST

$ curl http://localhost:8080/helloworld/



```
[{"id":"1","greeting":"Kosice="},
 {"id":"2","greeting":"Bonn="},
 {"id":"3","greeting":"Duesseldorf="}]
```

```
@RequestMapping(method = GET)
public List<HelloWorld> findAll() {
    return
        stream(helloWorldRepository.findAll().spliterator(), false)
            .collect(toList());
}
```

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Controller

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Demo - Hello World REST

$ curl http://localhost:8080/helloworld/**1**

{"id":"1","greeting":"Kosice="}

```
@RequestMapping(value = "/{id}", method = GET)
public HelloWorld fetchOne(@PathVariable String id) {
    return helloWorldRepository.findOne(id);
}
```

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Controller

Demo - Hello World REST

curl **-X POST -d 'Kosice'**
http://localhost:8080/helloworld/

HTTP/1.1 201 Created
{"greeting":"Kosice"}

```
@RequestMapping(method = POST)
public
ResponseEntity<HelloWorld>
createGreeting(@RequestBody String greeting) {
    HelloWorld world
        = helloWorldRepository.save(new HelloWorld(greeting));
    return new ResponseEntity<>(world, HttpStatus.CREATED);
}
```

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Controller

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Your Turn!

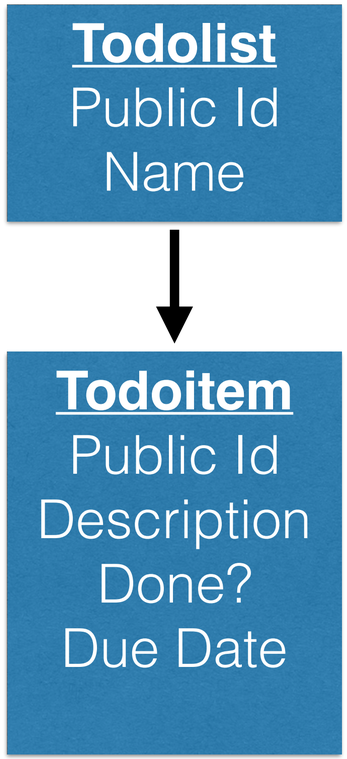
Building Boot-Todo

I want to create a new Todolist

I want to add a new Todoitem to a Todolist

I want to finish a Todoitem

I want to remove Todoitems from a Todollist



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Building Boot-Todo

- Fetch Spring-Boot dependencies
- Create Todoitem and Todolist as Resources
- Create RestController and Repository for Todoitem Resource
- Create RestController and Repository for Todolist Resource
- Test it!

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THANK YOU!