Spring Boot Actuator

Problem

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- How can I monitor and manage my application?

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- How can I check the application health?

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- How can I check the application health?
- How can I access application metrics?

Solution: Spring Boot Actuator

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- Exposes endpoints to monitor and manage your application

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- REST endpoints are automatically added to your application

No need to write additional code!

You get new REST endpoints for FREE!

Spring Boot Actuator

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- Adding the dependency to your POM file

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```
<dependency>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-actuator</artifactId>
</dependency>
```

Spring Boot Actuator

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`/health`	**Health information about your application**

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`/info`	**Information about your project**

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- Endpoints are prefixed with: **`/actuator`**

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`/info`	**Information about your project**
...	

Remember:

You get these new REST endpoints for FREE!

Health Endpoint

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Health status is customizable
based on
your own business logic

Info Endpoint

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- `/info` gives information about your application

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- `/info` gives information about your application
- Default is empty

Info Endpoint

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- Update **`application.properties`** with your app info

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File: src/main/resources/application.properties

```
info.app.name=My Super Cool App
info.app.description=A crazy and fun app, yoohoo!
info.app.version=1.0.0
```

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`/beans`	**List of all beans registered in the Spring application context**

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Name	Description
`/auditevents`	**Audit events for your application**
`/beans`	**List of all beans registered in the Spring application context**
`/mappings`	**List of all @RequestMapping paths**
...	

Spring Boot Actuator Endpoints

Spring Boot Actuator Endpoints

Full list

www.luv2code.com/actuator-endpoints

ID	Description
`auditevents`	Exposes audit events information for the current applic
`beans`	Displays a complete list of all the Spring beans in your
`caches`	Exposes available caches.
`conditions`	Shows the conditions that were evaluated on configura or did not match.
`configprops`	Displays a collated list of all `@ConfigurationPrope`
`env`	Exposes properties from Spring's `ConfigurableEnv`

Exposing Endpoints

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- To expose all actuator endpoints over HTTP

File: src/main/resources/application.properties

```
# Use wildcard "*" to expose all endpoints
# Can also expose individual endpoints with a comma-delimited list
#
management.endpoints.web.exposure.include=*
```

Get A List of Beans

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- Access `http://localhost:8080/actuator/beans`

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```
{
  "contexts": {
    "application": {
      "beans": {
        "endpointCachingOperationInvokerAdvisor": {
          "aliases": [],
          "scope": "singleton",
          "type": "org.springframework.boot.actuate.endpoint.invoker.cache.Cach
          "resource": "class path resource [org/springframework/boot/actuate/au
          "dependencies": [
            "environment"
          ]
        },
        "defaultServletHandlerMapping": {
          "aliases": [],
          "scope": "singleton",
          "type": "org.springframework.web.servlet.HandlerMapping",
          "resource": "class path resource [org/springframework/boot/autoconfig
          "dependencies": []
        },
        "org.springframework.boot.autoconfigure.web.servlet.WebMvcAutoConfigura
          "aliases": [],
          "scope": "singleton",
          "type":
```

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        "endpointCachingOperationInvokerAdvisor": {
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          "dependencies": []
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          "aliases": [],
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```


What about security??

We'll add security in later videos

Development Process

Step-By-Step

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1. Edit **`pom.xml`** and add **`spring-boot-starter-acuator`**

Development Process

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Development Process

Step-By-Step

1. Edit **`pom.xml`** and add **`spring-boot-starter-acuator`**

2. View actuator endpoints for: **`/health`** and **`/info`**

3. Edit **`application.properties`** to customize **`/info`**