

Spring REST Controller - Dev Process



Development Process

Step-By-Step

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1. Add Maven dependency for Spring MVC and Jackson project

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1. Add Maven dependency for Spring MVC and Jackson project
2. Add code for All Java Config: @Configuration
3. Add code for All Java Config: Servlet Initializer

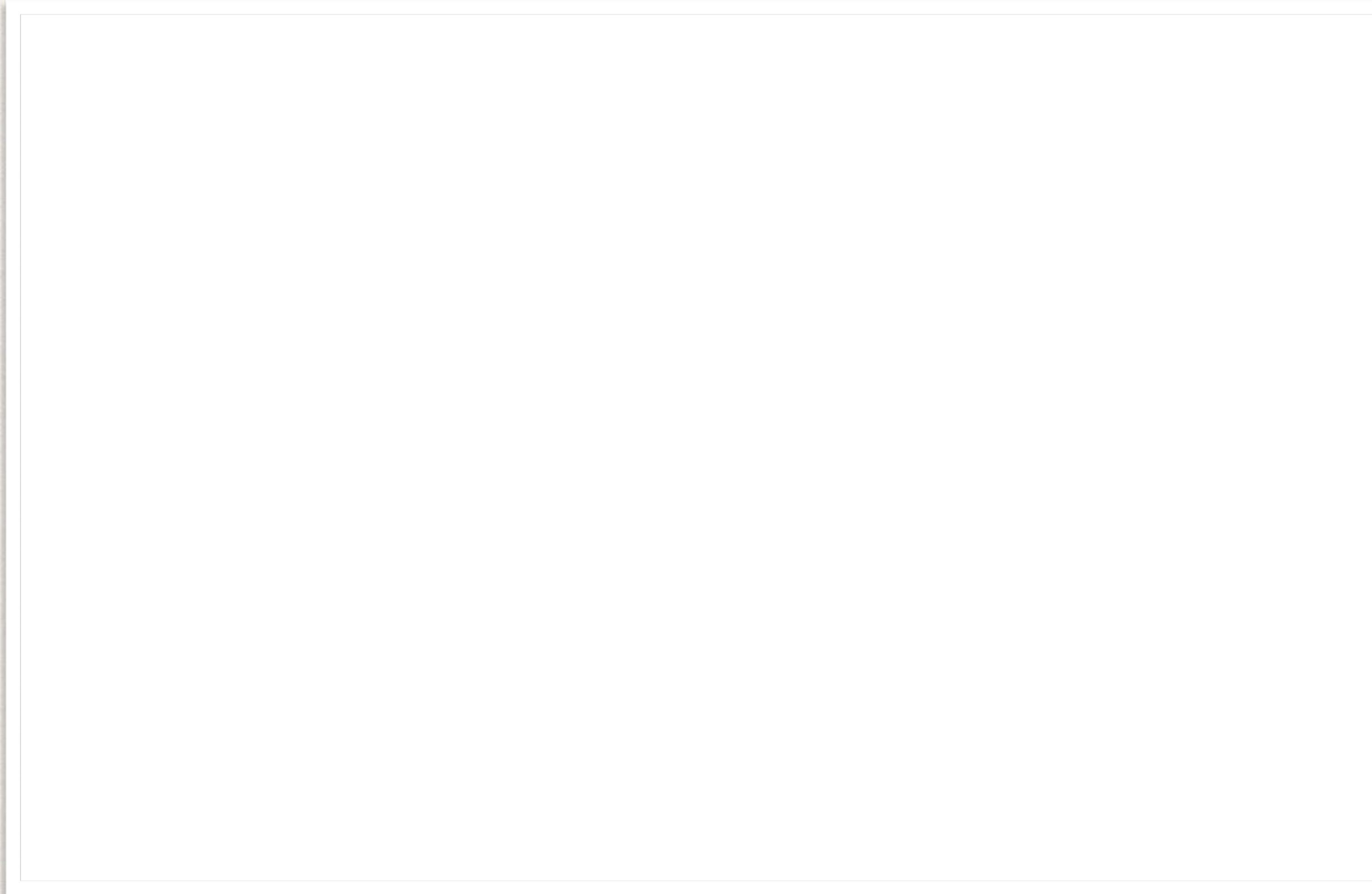
Development Process

Step-By-Step

1. Add Maven dependency for Spring MVC and Jackson project
2. Add code for All Java Config: @Configuration
3. Add code for All Java Config: Servlet Initializer
4. Create Spring REST Service using @RestController

Step 1: Add Maven Dependencies

File: pom.xml

A large, empty rectangular box with a thin black border, intended for the user to add Maven dependencies to the pom.xml file.

Step 1: Add Maven Dependencies

File: pom.xml

```
<!-- Add Spring MVC and REST support -->  
<dependency>  
  <groupId>org.springframework</groupId>  
  <artifactId>spring-webmvc</artifactId>  
  <version>...</version>  
</dependency>
```

**Will load all supporting
dependencies:
spring-core, logging etc ...**

Step 1: Add Maven Dependencies

File: pom.xml

```
<!-- Add Spring MVC and REST support -->
<dependency>
  <groupId>org.springframework</groupId>
  <artifactId>spring-webmvc</artifactId>
  <version>...</version>
</dependency>

<!-- Add Jackson for JSON converters -->
<dependency>
  <groupId>com.fasterxml.jackson.core</groupId>
  <artifactId>jackson-databind</artifactId>
  <version>...</version>
</dependency>
```

**Add Jackson support
we'll need it later for converting
JSON <--> POJO**

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File: pom.xml

```
<!-- Add Spring MVC and REST support -->
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  <groupId>org.springframework</groupId>
  <artifactId>spring-webmvc</artifactId>
  <version>...</version>
</dependency>

<!-- Add Jackson for JSON converters -->
<dependency>
  <groupId>com.fasterxml.jackson.core</groupId>
  <artifactId>jackson-databind</artifactId>
  <version>...</version>
</dependency>

<!-- Add Servlet support for
      Spring's AbstractAnnotationConfigDispatcherServletInitializer -->
<dependency>
  <groupId>javax.servlet</groupId>
  <artifactId>javax.servlet-api</artifactId>
  <version>...</version>
</dependency>
```

Add Servlet support

Step 2: All Java Config: @Configuration

File: DemoAppConfig.java

```
@Configuration
@EnableWebMvc
@ComponentScan(basePackages="com.luv2code.springdemo")
public class DemoAppConfig {

}
```


Web App_INITIALIZER

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AbstractAnnotationConfigDispatcherServletInitializer

Web App_INITIALIZER (more info)

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- Your TO DO list

Web App_INITIALIZER (more info)

AbstractAnnotationConfigDispatcherServletInitializer

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 - Extend this abstract base class

Web App_INITIALIZER (more info)

AbstractAnnotationConfigDispatcherServletInitializer

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 - Extend this abstract base class
 - Override required methods

Web App_INITIALIZER (more info)

AbstractAnnotationConfigDispatcherServletInitializer

- Your TO DO list
 - Extend this abstract base class
 - Override required methods
 - Specify servlet mapping and location of your app config

Step 3: All Java Config: Servlet initializer

File:MySpringMvcDispatcherServletInitializer.java

```
import org.springframework.web.servlet.support.AbstractAnnotationConfigDispatcherServletInitializer;

public class MySpringMvcDispatcherServletInitializer extends AbstractAnnotationConfigDispatcherServletInitializer {

}
```


Step 3: All Java Config: ServletInitializer

File:MySpringMvcDispatcherServletInitializer.java

```
import org.springframework.web.servlet.support.AbstractAnnotationConfigDispatcherServletInitializer;

public class MySpringMvcDispatcherServletInitializer extends AbstractAnnotationConfigDispatcherServletInitializer {

    @Override
    protected Class<?>[] getRootConfigClasses() {
        // TODO Auto-generated method stub
        return null;
    }

}
```


Step 3: All Java Config: ServletInitializer

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        return new Class[] { DemoAppConfig.class };
    }

}
```


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}
```



Our config class
from Step 2

Step 3: All Java Config: ServletInitializer

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    protected Class<?>[] getRootConfigClasses() {
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        return null;
    }

    @Override
    protected Class<?>[] getServletConfigClasses() {
        return new Class[] { DemoAppConfig.class };
    }

    @Override
    protected String[] getServletMappings() {
        return new String[] { "/" };
    }
}
```

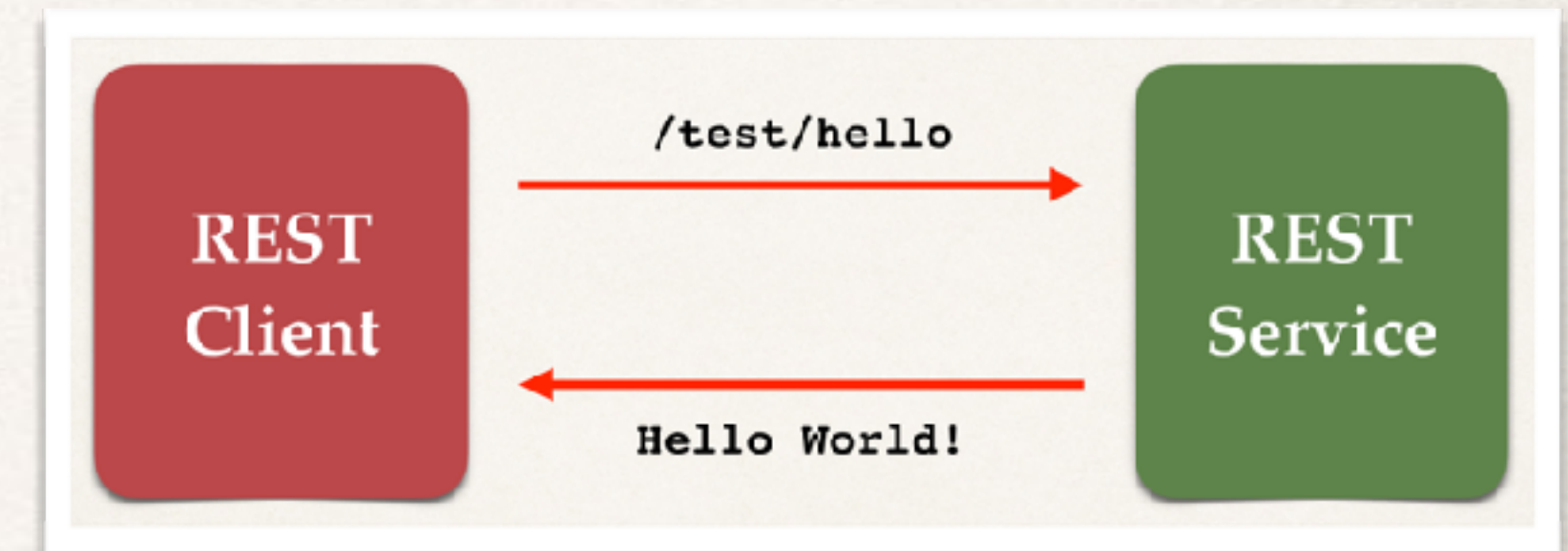

Whew!!!!

Now for the easy stuff

Create Spring REST Controller

easy peazy ...

Step 4: Create Spring REST Service



Step 4: Create Spring REST Service

```
@RestController
@RequestMapping("/test")
public class DemoRestController {

    @GetMapping("/hello")
    public String sayHello() {
        return "Hello World!";
    }
}
```

