

Building An Application

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Prerequisites



Java



Maven

***ma*ven**

Spring STS



Tomcat



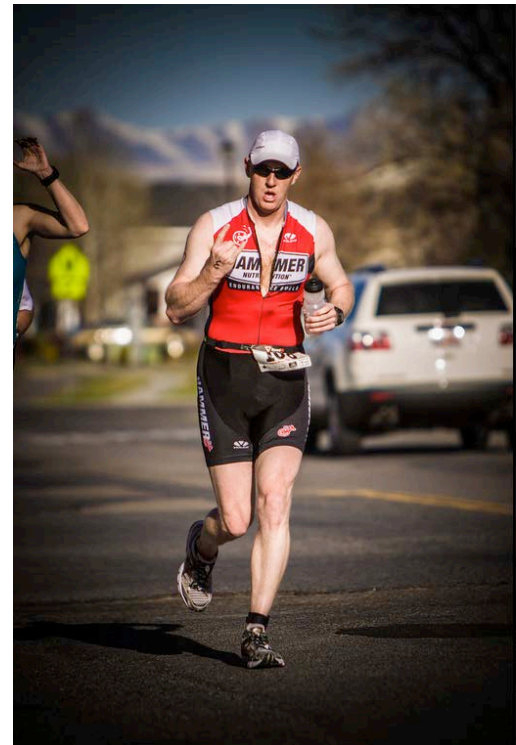
Apache Tomcat

What We Are Building



App Features

- Allow for entering minutes exercising
- Show total minutes
- Set goal for the day
- Notify when goal is reached



Getting Spring MVC

- **Spring Framework:**

- <http://www.springsource.org/spring-framework>
- Can't download just the web resources
- 21 different jars that it downloads



A screenshot of a file explorer window showing a list of six JAR files. Each file has a small icon to its left and is highlighted with a light blue background. The files are:

- org.springframework.test-3.1.3.RELEASE.jar
- org.springframework.transaction-3.1.3.RELEASE.jar
- org.springframework.web-3.1.3.RELEASE.jar
- org.springframework.web.portlet-3.1.3.RELEASE.jar
- org.springframework.web.servlet-3.1.3.RELEASE.jar
- org.springframework.web.struts-3.1.3.RELEASE.jar

maven

- Using Maven we only need three dependencies

- Dependencies:

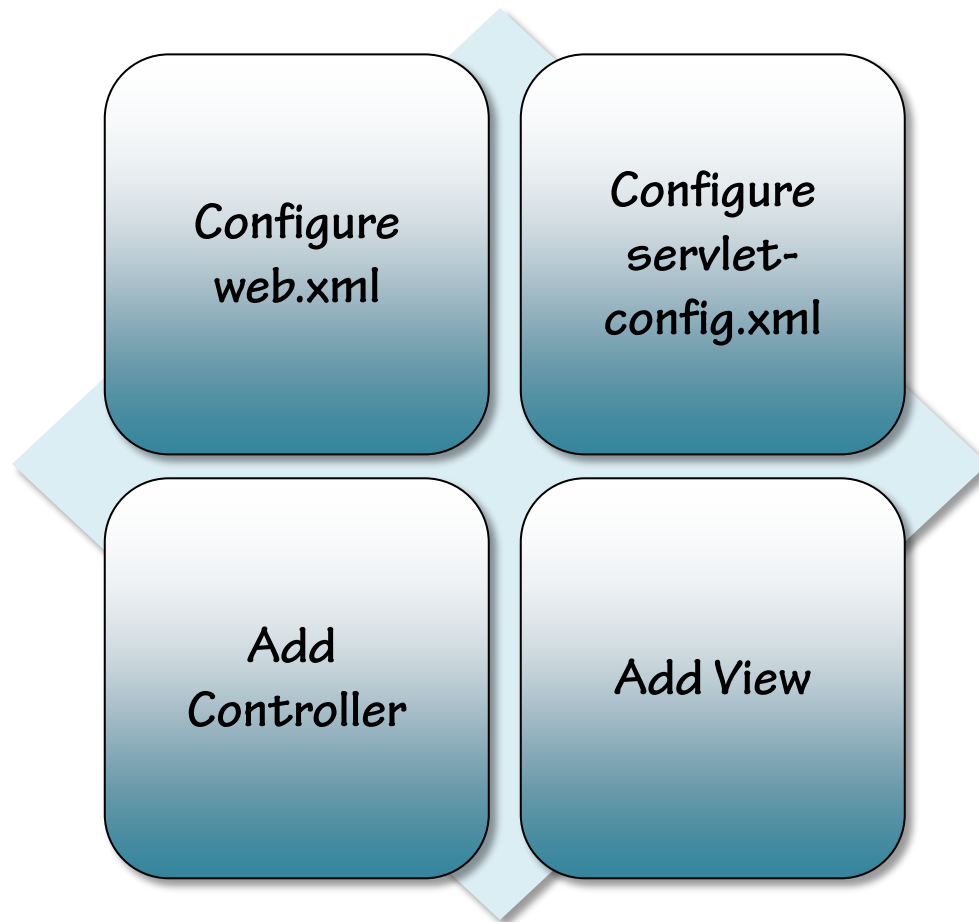
- spring-webmvc
- servlet-api
- jstl

```
<dependency>  
  <groupId>org.springframework</groupId>  
  <artifactId>spring-webmvc</artifactId>  
  <version>3.1.2.RELEASE</version>  
</dependency>
```

```
<dependency>  
  <groupId>javax.servlet</groupId>  
  <artifactId>servlet-api</artifactId>  
  <version>2.5</version>  
  <scope>provided</scope>  
</dependency>
```

```
<dependency>  
  <groupId>javax.servlet</groupId>  
  <artifactId>jstl</artifactId>  
  <version>1.2</version>  
  <scope>provided</scope>  
</dependency>
```

Spring MVC Configuration



Tomcat

FitnessTracker.war

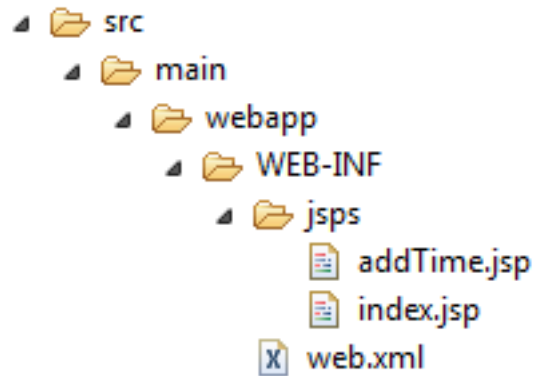
Tomcat
Web Container



Apache Tomcat

STANDARDS

Views



`InternalResourceViewResolver`

`addTime.jsp = http://localhost:8080/fitness/addTime`

Controllers

- **Annotation Based**
 - @Controller
- **Named whatever you want**
 - Typically named around business domain
- **Path set using annotation**
 - @RequestMapping
- **TimeController.java**



Examples

- **com.fitness.controllers.TimeController**
 - <http://localhost:8080/fitness/time>
 - <http://localhost:8080/fitness/addTime>
 - <http://localhost:8080/fitness/updateTime>



Namespace

```
<beans xmlns="http://www.springframework.org/schema/beans"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:p="http://www.springframework.org/schema/p"
  xmlns:aop="http://www.springframework.org/schema/aop"
  xmlns:context="http://www.springframework.org/schema/context"
  xmlns:jee="http://www.springframework.org/schema/jee"
  xmlns:tx="http://www.springframework.org/schema/tx"
  xmlns:mvc="http://www.springframework.org/schema/mvc"
  xsi:schemaLocation="
    http://www.springframework.org/schema/aop http://www.springframework.org/schema/aop/spring-aop-3.0.5.xsd
    http://www.springframework.org/schema/beans http://www.springframework.org/schema/beans/spring-beans-3.0.xsd
    http://www.springframework.org/schema/context http://www.springframework.org/schema/context/spring-context-3.0.xsd
    http://www.springframework.org/schema/jee http://www.springframework.org/schema/jee/spring-jee-3.0.xsd
    http://www.springframework.org/schema/tx http://www.springframework.org/schema/tx/spring-tx-3.0.xsd
    http://www.springframework.org/schema/task http://www.springframework.org/schema/task/spring-task.xsd
    http://www.springframework.org/schema/mvc http://www.springframework.org/schema/mvc/spring-mvc-3.0.xsd">
```

```
  <mvc:annotation-driven />
  <context:component-scan base-package="com.training.controller"/>

  <bean class="org.springframework.web.servlet.view.BeanNameViewResolver"/>
```