**SPRING MVC PROJECT ARCHITECTURE**

1. **Create Maven project**
2. **Configure pom.xml in project**

* Add some vital dependencies:
* Servlet and Spring Framework
* Servlet – api
* Spring – core
* Spring – context
* Spring – beans
* Spring – web
* Spring – webmvc
* Spring – orm
* Spring – aop
* Hibernate
* Hibernate – core
* Hibernate – annotations
* Hibernate – commons – annotations
* Hibernate – entitymanager (Note: In this part, need to add **dependencies** named “hibernate – jpa – 2.0 – api” inside <exclusions><exclusion>**dependencies**</exclusion></exclusions>)
* Hibernate – jpa – 2.0 – api
* JDBC Driver
* Jtds
* Jackson (If project works with json)
* Jackson – core
* Jackson – annotations
* Jackson – databind
* **Notes**: All of dependencies is referred from [**https://mvnrepository.com/**](https://mvnrepository.com/).

1. **Configure web.xml in project**

* Declare servlet

<servlet>

<servlet-name>dispatcher</servlet-name>

<servlet-class>org.springframework.web.servlet.DispatcherServlet</servlet-class>

<init-param>

<param-name>contextConfigLocation</param-name>

<param-value>/WEB-INF/dispatcher-servlet.xml</param-value>

</init-param>

<load-on-startup>1</load-on-startup>

</servlet>

* Declare servlet – mapping to point the project to the servlet that it will work.

<servlet-mapping>

<servlet-name>dispatcher</servlet-name>

<url-pattern>/</url-pattern>

</servlet-mapping>

* Configure the session timeout for Web application

<session-config>

<!-- in minutes -->

<session-timeout>60</session-timeout>

</session-config>

* To prepare the datasource file in order to add database in the project, needs to add the other code snippet

<!-- Database Configuration -->

<import resource="**DataSource.xml**"/><mvc:resources location="**/webapp/**" mapping="**/resources/\*\***"/>

<!-- Hibernate 4 SessionFactory Bean definition -->

<import resource="**hibernate.cfg.xml**"/>

[<bean class="**org.springframework.orm.hibernate4.HibernateTransactionManager**" id="**transactionManager**">](file:///H:\Submit\RER\RERBE\src\main\webapp\WEB-INF\dispatcher-servlet.xml)

<property name="**sessionFactory**" ref="**sessionFactory**"/>

</bean>

* Prevent from cross domain when the project is published in Internet. Remember to use a filter named CorsFilter to solve this problem (<filter-mapping> is required)

1. **Create dispatcher-servlet.xml file to create a new dispatcher for servlet**

* First of all, needs to add more .xml files that involve with the Spring framework. Normally, some file .xml is defined the schema for necessary portions of the project components that is used for the project.

<beans xmlns="http://www.springframework.org/schema/beans"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:aop="http://www.springframework.org/schema/aop"

xmlns:context="http://www.springframework.org/schema/context"

xmlns:mvc="http://www.springframework.org/schema/mvc" xmlns:jee="http://www.springframework.org/schema/jee"

xmlns:lang="http://www.springframework.org/schema/lang" xmlns:p="http://www.springframework.org/schema/p"

xmlns:tx="http://www.springframework.org/schema/tx" xmlns:util="http://www.springframework.org/schema/util"

xsi:schemaLocation="http://www.springframework.org/schema/beans http://www.springframework.org/schema/beans/spring-beans-4.0.xsd

http://www.springframework.org/schema/aop http://www.springframework.org/schema/aop/spring-aop-4.0.xsd

http://www.springframework.org/schema/context http://www.springframework.org/schema/context/spring-context-4.0.xsd

http://www.springframework.org/schema/jee http://www.springframework.org/schema/jee/spring-jee-4.0.xsd

http://www.springframework.org/schema/lang http://www.springframework.org/schema/lang/spring-lang-4.0.xsd

http://www.springframework.org/schema/tx http://www.springframework.org/schema/tx/spring-tx-4.0.xsd

http://www.springframework.org/schema/util http://www.springframework.org/schema/util/spring-util-4.0.xsd

http://www.springframework.org/schema/mvc http://www.springframework.org/schema/mvc/spring-mvc-4.0.xsd ">

1. **Setup the databasource file for project is connected to database**