

Lab: Hibernate Configuration

This **tutorial** provides step-by-step guidelines to setup your Hibernate settings. You will learn how to configure your executable jar files. There will be a good explanation on how to run **java jar** programs powered by **CGI scripts** in order to properly **persist** your objects.

Dependencies

You will need only two dependencies for to run **hibernate**. The first one is hibernate itself. Use version **5.x.x** The second dependency should be **MySQL connector**. Again use version above **5**. See the example below:

pom.xml
<pre><dependencies> <dependency> <groupId>mysql</groupId> <artifactId>mysql-connector-java</artifactId> <version>5.1.38</version> </dependency> <dependency> <groupId>org.hibernate</groupId> <artifactId>hibernate-core</artifactId> <version>5.2.5.Final</version> </dependency> </dependencies></pre>

Persistence

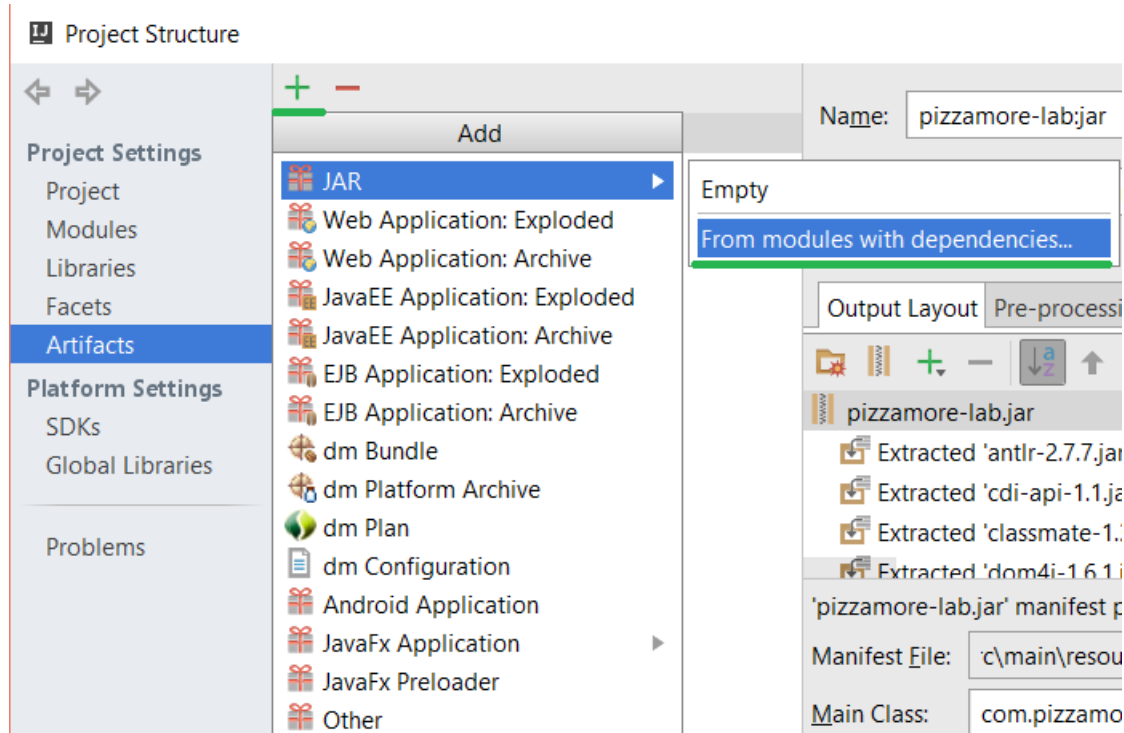
Hibernate requires **persistence.xml** file. Is should be located in **resources/META-INF/**. You have to configure your **database credentials**. Set a proper name of the **persistence unit**.

persistence.xml
<pre><persistence xmlns="http://java.sun.com/xml/ns/persistence" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://java.sun.com/xml/ns/persistence http://java.sun.com/xml/ns/persistence/persistence_2_0.xsd" version="2.0"> <persistence-unit name="unit"> <properties> <property name="javax.persistence.jdbc.driver" value="com.mysql.jdbc.Driver"/> <property name="javax.persistence.jdbc.url" value="jdbc:mysql://localhost/database_name? createDatabaseIfNotExist=true"/> <property name="javax.persistence.jdbc.user" value="user"/> <property name="javax.persistence.jdbc.password" value="password"/> <property name="hibernate.dialect" value="org.hibernate.dialect.MySQL5InnoDBDialect"/> <property name="hibernate.hbm2ddl.auto" value="update"/> </properties> </persistence-unit> </persistence></pre>

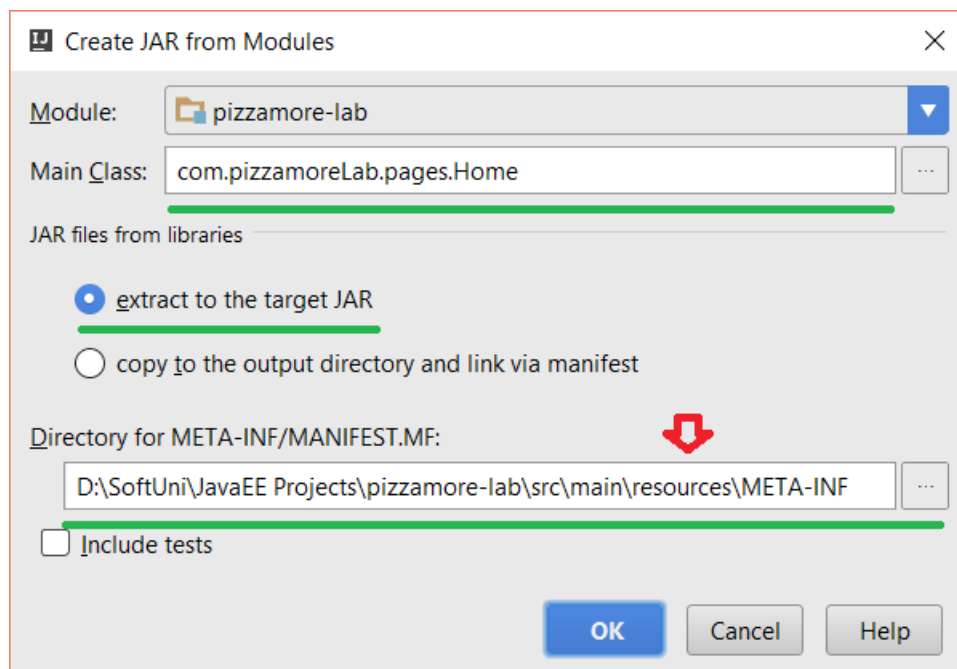
Executable Jar

The last thing required to run **Hibernate** is to create an **executable jar file**. Go to **File->Project Structure->Artifacts**.

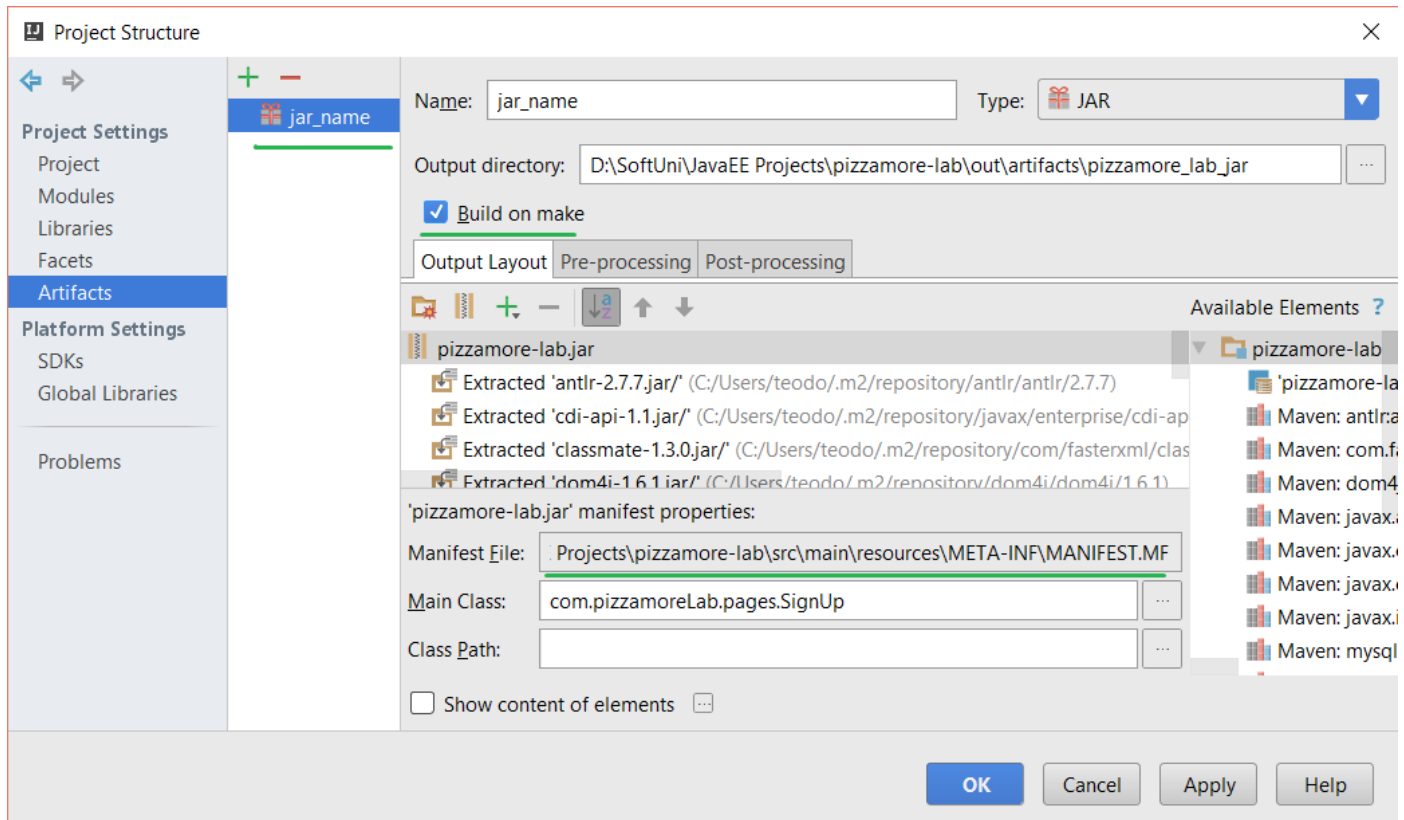
Create a new artifact that would be a **jar file**. Select **+>JAR->From modules with dependencies**.



Create a **manifest file**. It should be located in **resources/META-INF**. Choose the class that should be your starting point.



Include all the hibernate jars **extracted**. Make **build on make** active.



CGI Script

The last step is to create a script that would call your jar file.

main.cgi
<pre>#!C:\cygwin64\bin\bash.exe chcp 65001 java -Dcgi.request_method=\$REQUEST_METHOD -Dcgi.query_string=\$QUERY_STRING -jar Home.jar \$HTTP_COOKIE</pre>