

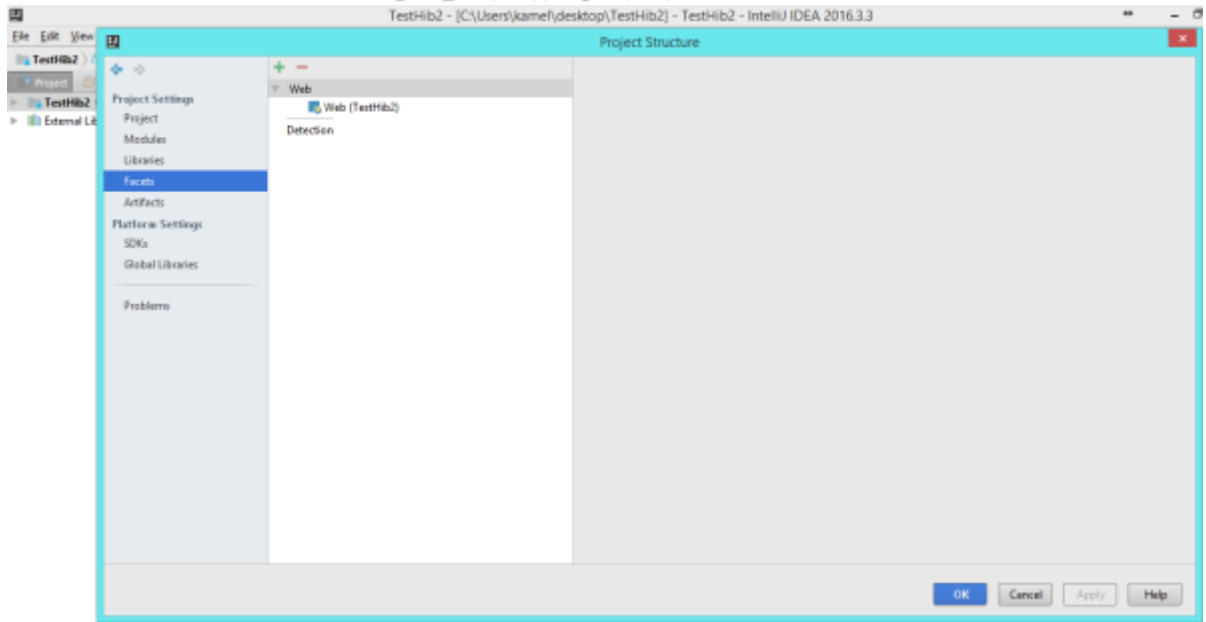


HIBERNATE SETUP FOR A SAMPLE PROJECT (YOU NEED NORTHWIND DATABASE FOR THIS)

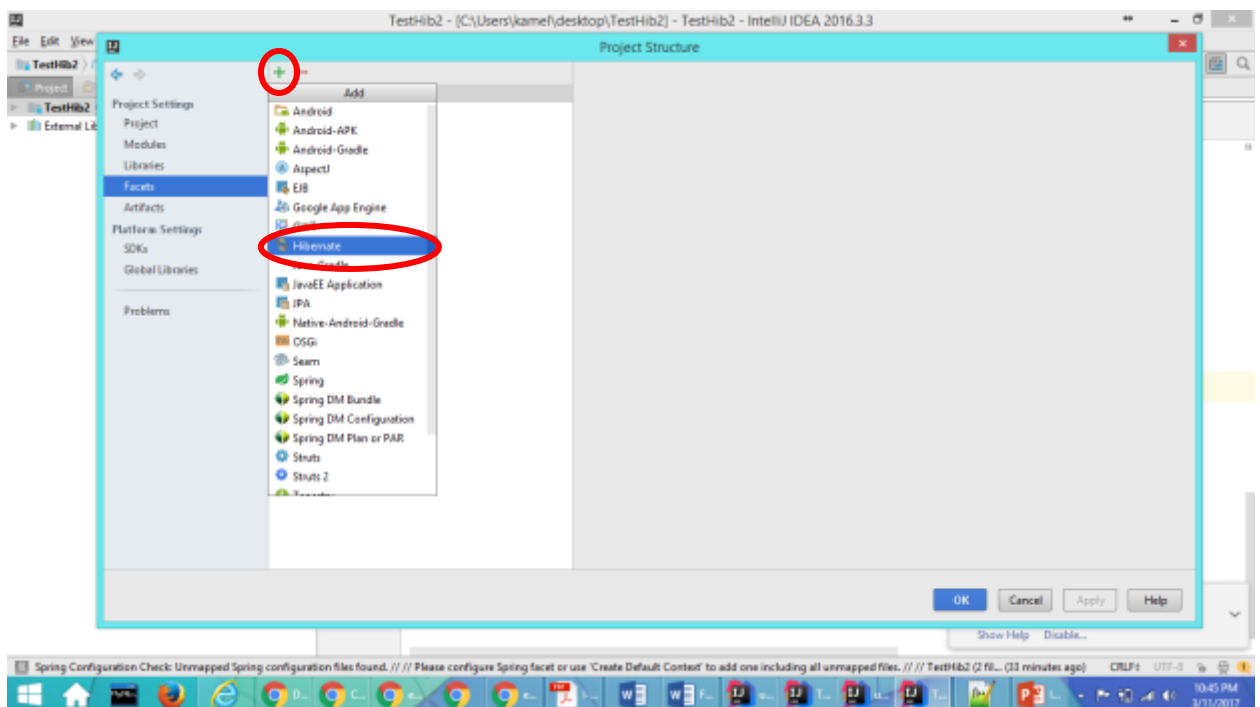
1. Add The following dependencies to your POM.xml file.

```
<dependency>
  <groupId>javassist</groupId>
  <artifactId>javassist</artifactId>
  <version>3.12.1.GA</version>
</dependency>
<dependency>
  <groupId>org.hibernate</groupId>
  <artifactId>hibernate-core</artifactId>
  <version>3.6.3.Final</version>
</dependency>
<dependency>
  <groupId>org.hibernate</groupId>
  <artifactId>hibernate-validator</artifactId>
  <version>5.2.4.Final</version>
</dependency>
```

2. Go to project structure -> Modules -> then select Facets

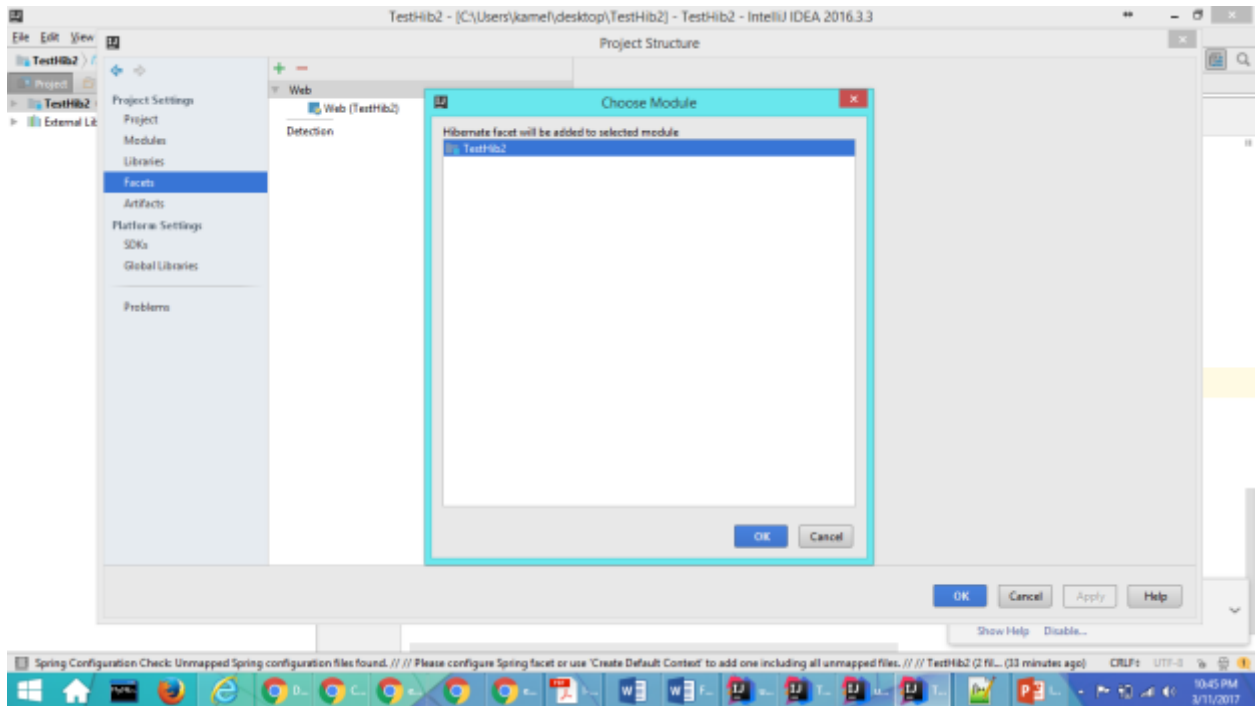


3. Click on the green + at the top to add the Hibernate Facet.

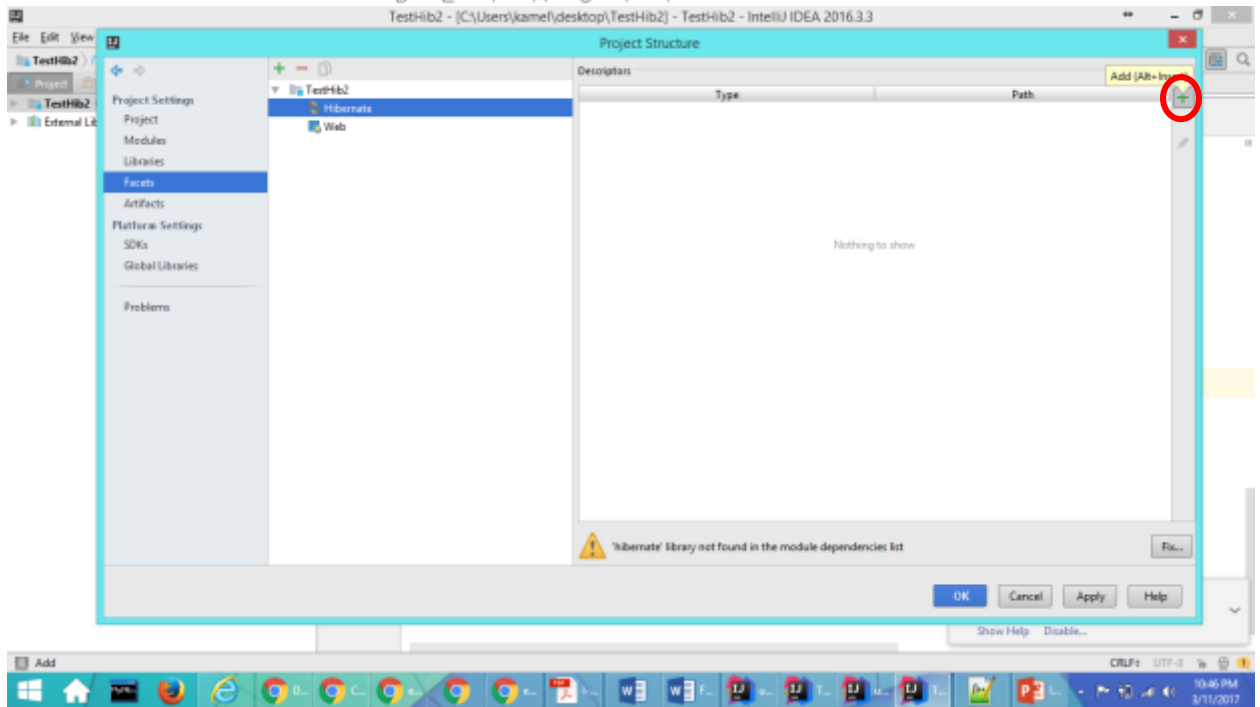




4. A window will open. Select OK



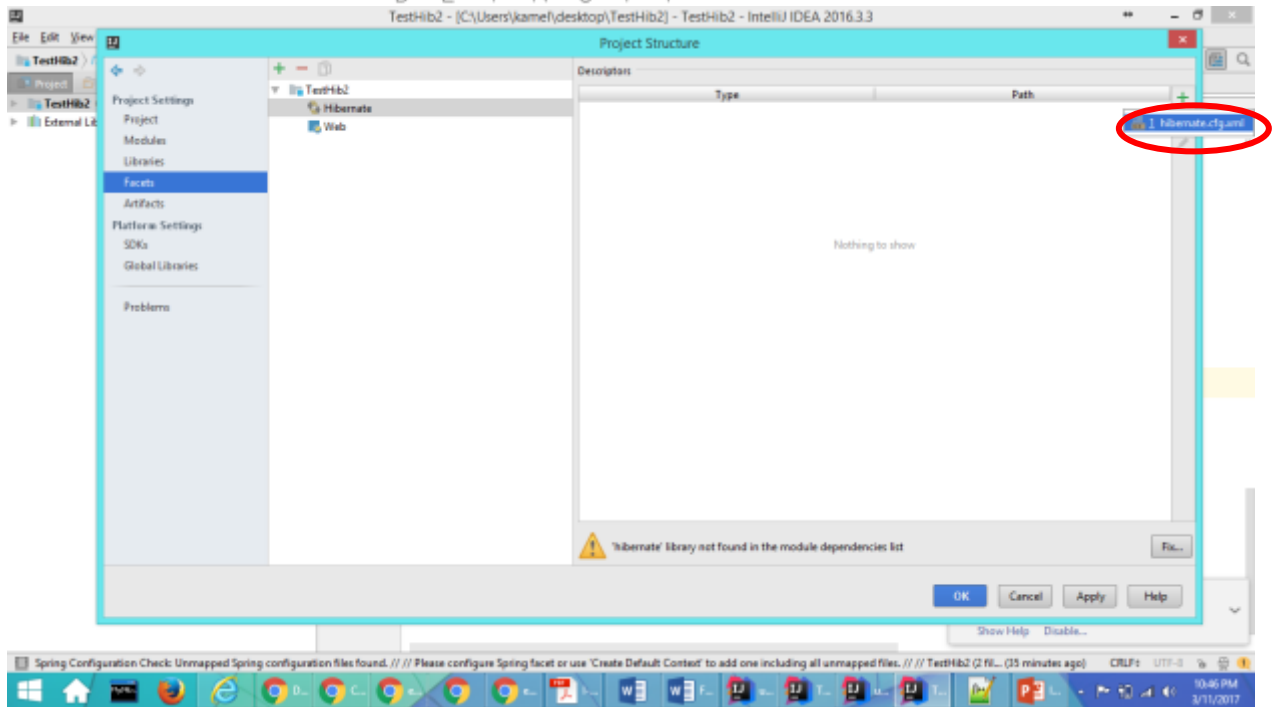
5. Once you see the Hibernate Facet, click on the green button at the top right corner at the **Descriptors** panel.



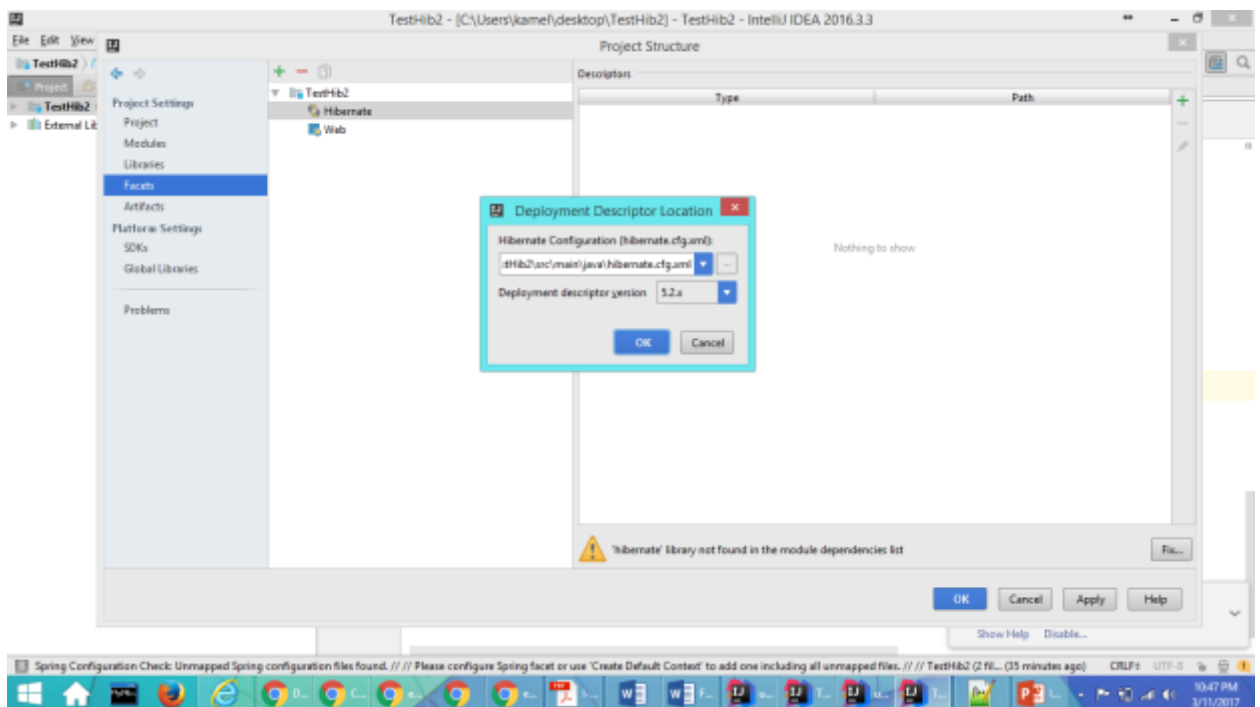
6. Select the hibernate.cfg.xml

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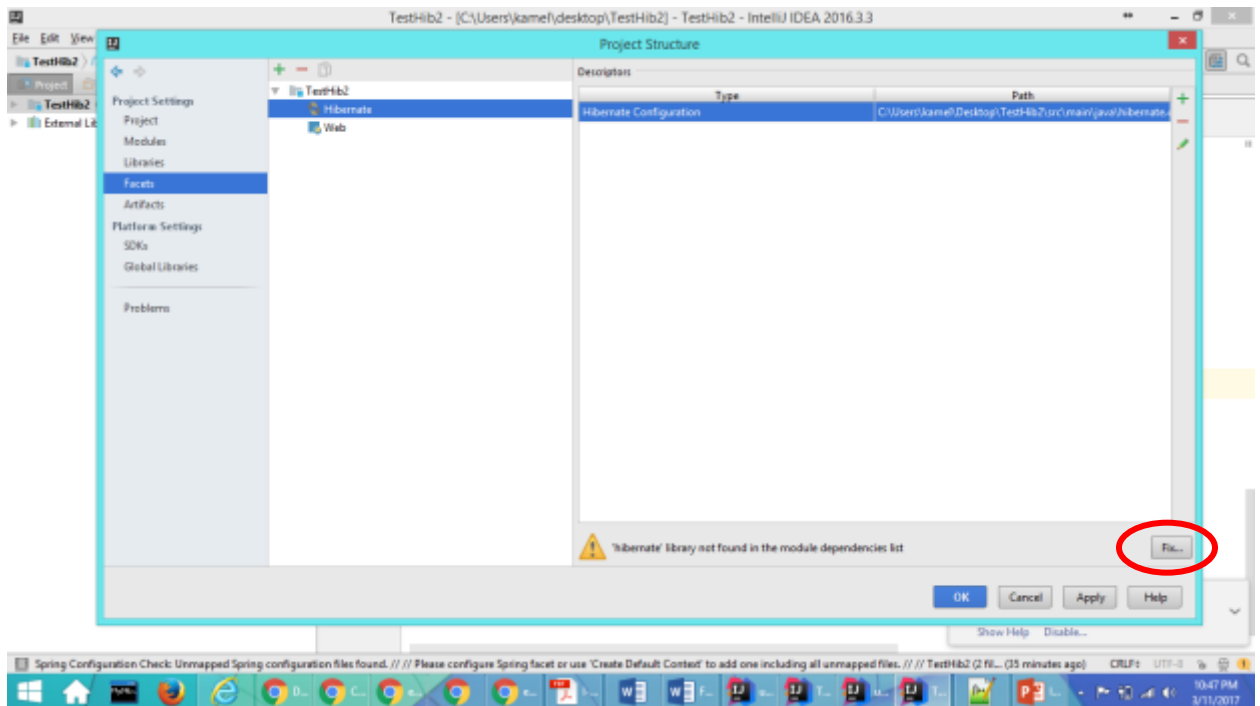


7. Once you see the Deployment Descriptor Window, click OK.

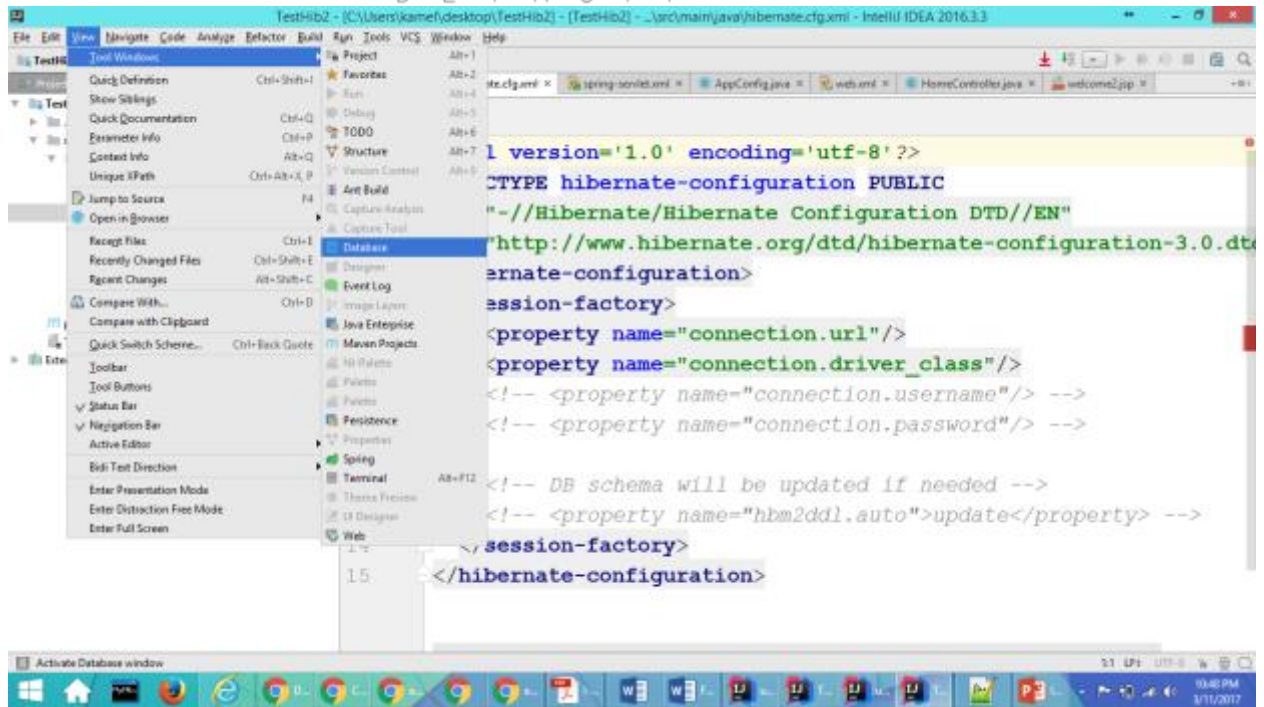




8. This is what you should see for now. If the Hibernate libraries are not loaded yet, you can click on the fix button. Press OK when you are done to close the window.



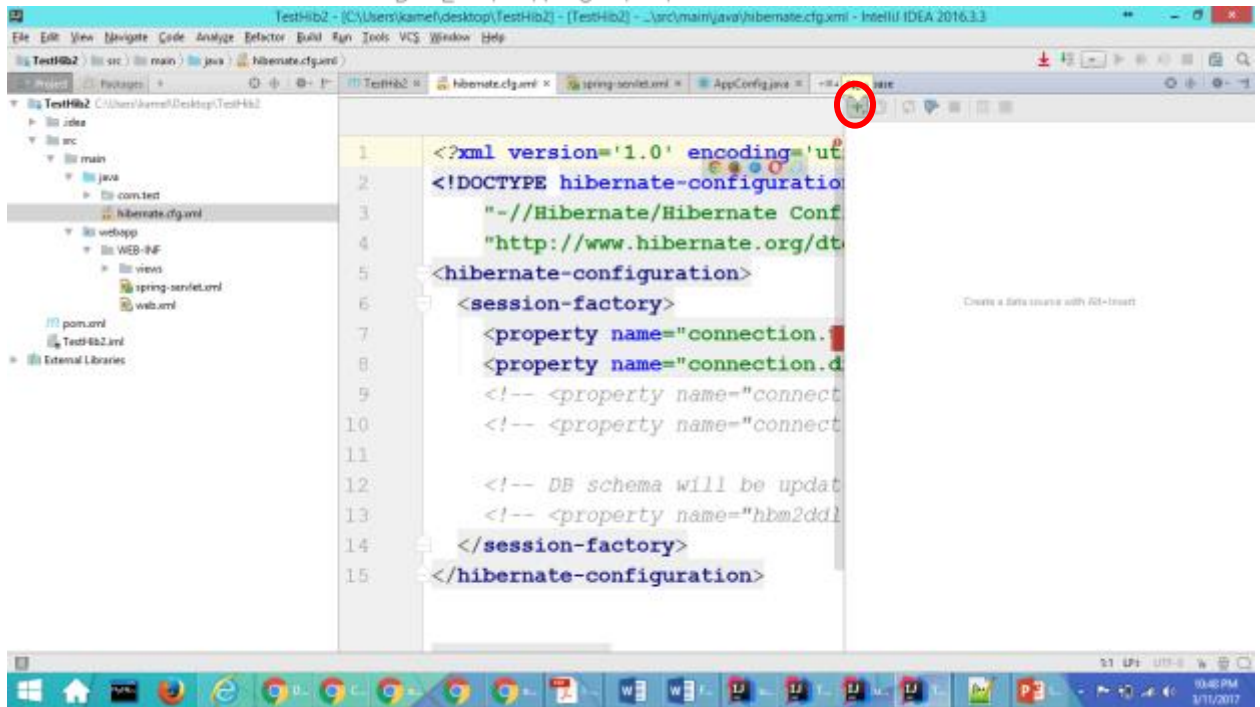
9. Go to View -> Tool Windows-> Database



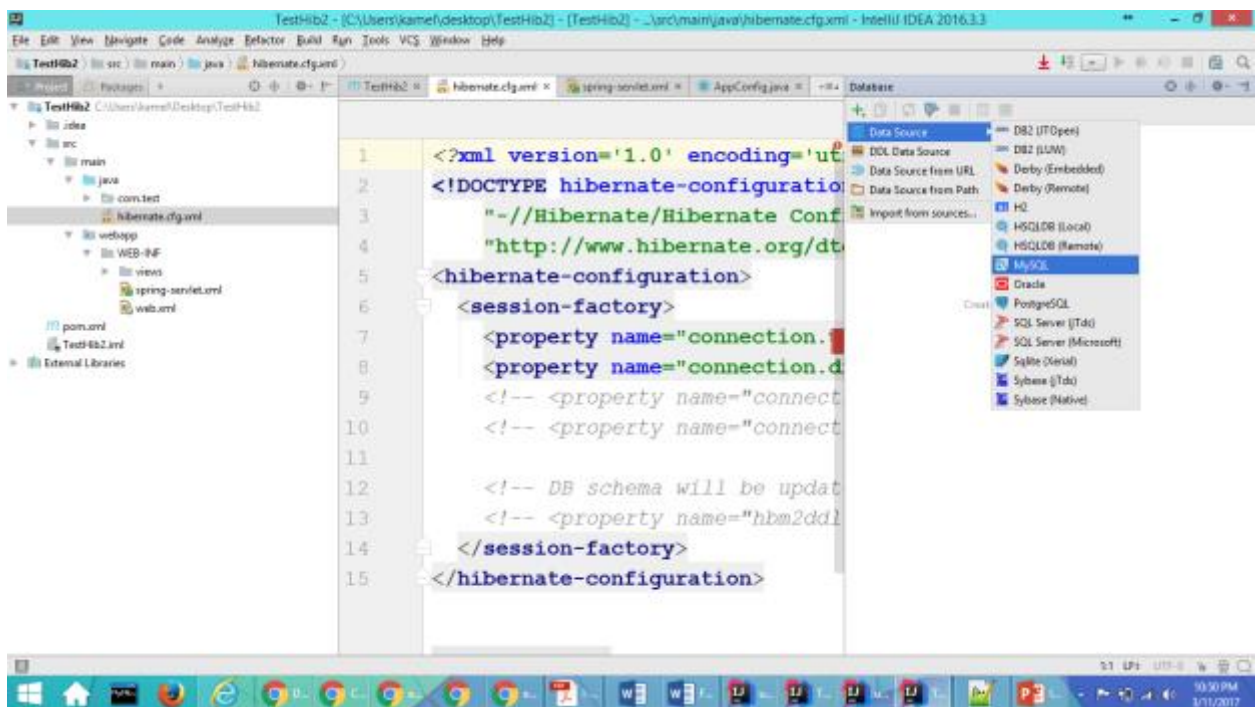
10. You will see the database panel to the right side. Click on the green button at the top left corner to add a new data source.

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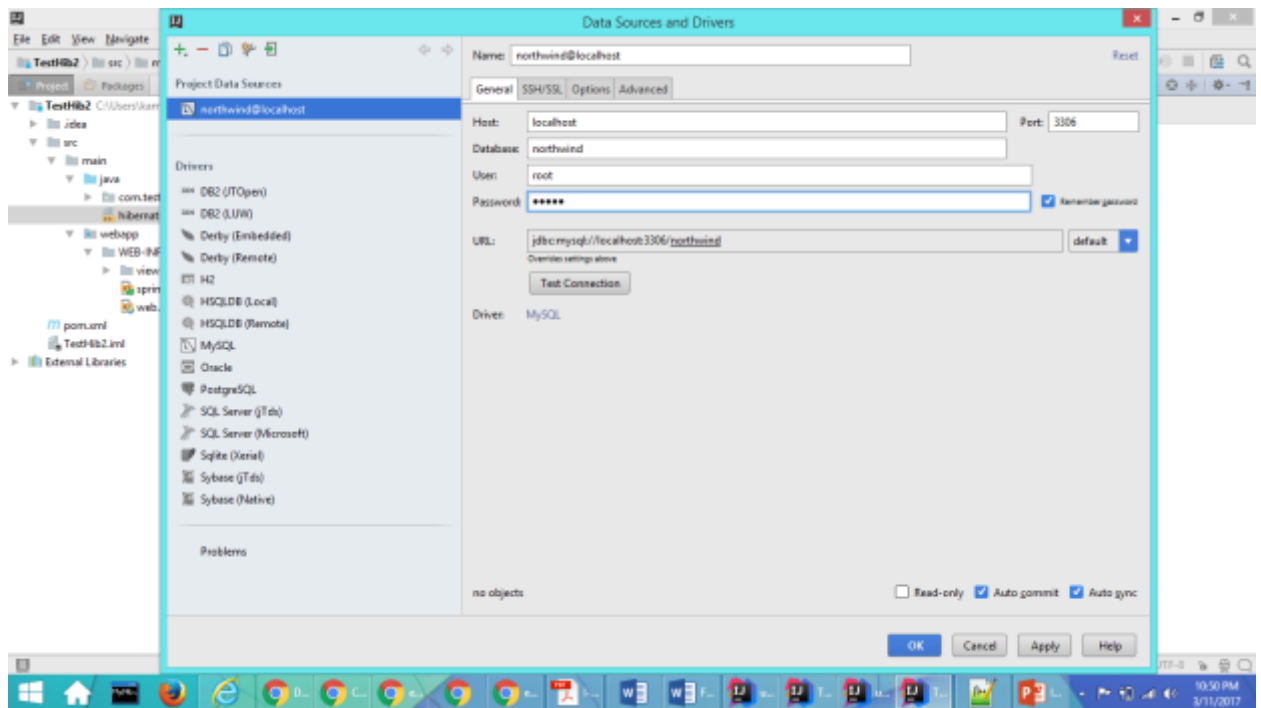


11. Select Data source -> MySQL

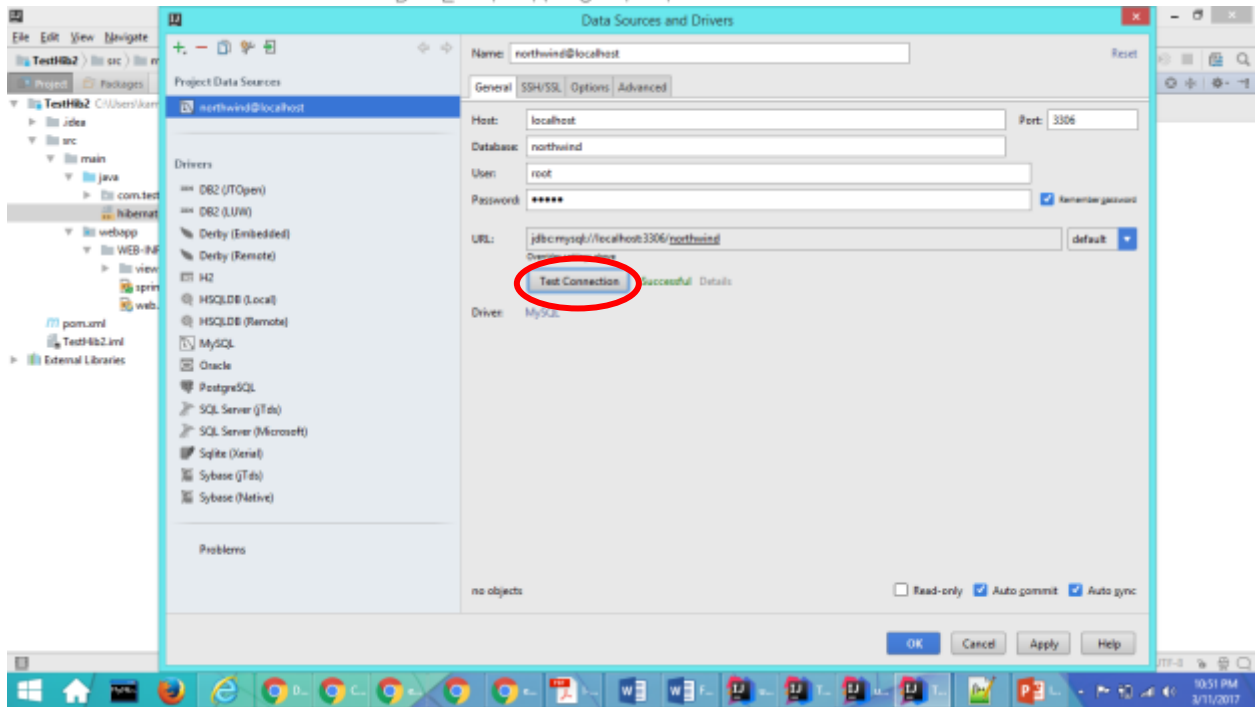




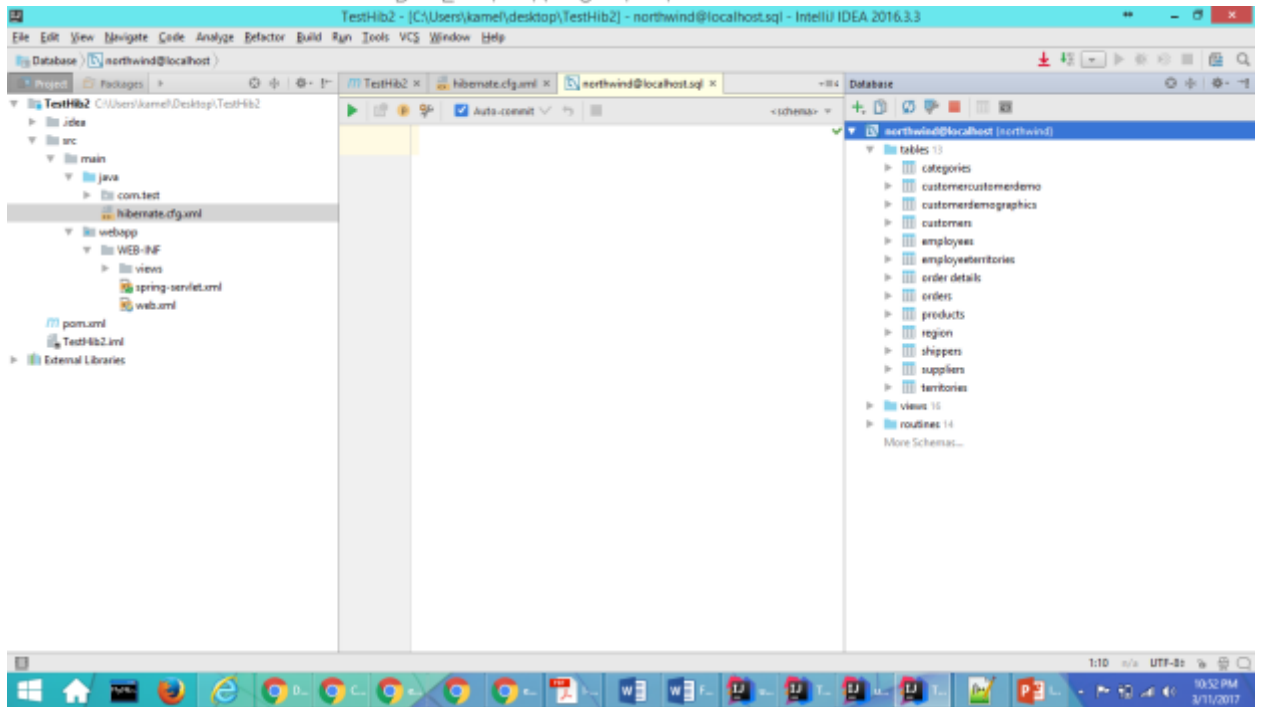
12. In the Data sources and Drivers window, fill in the connection information. You need to write down the user and the password.



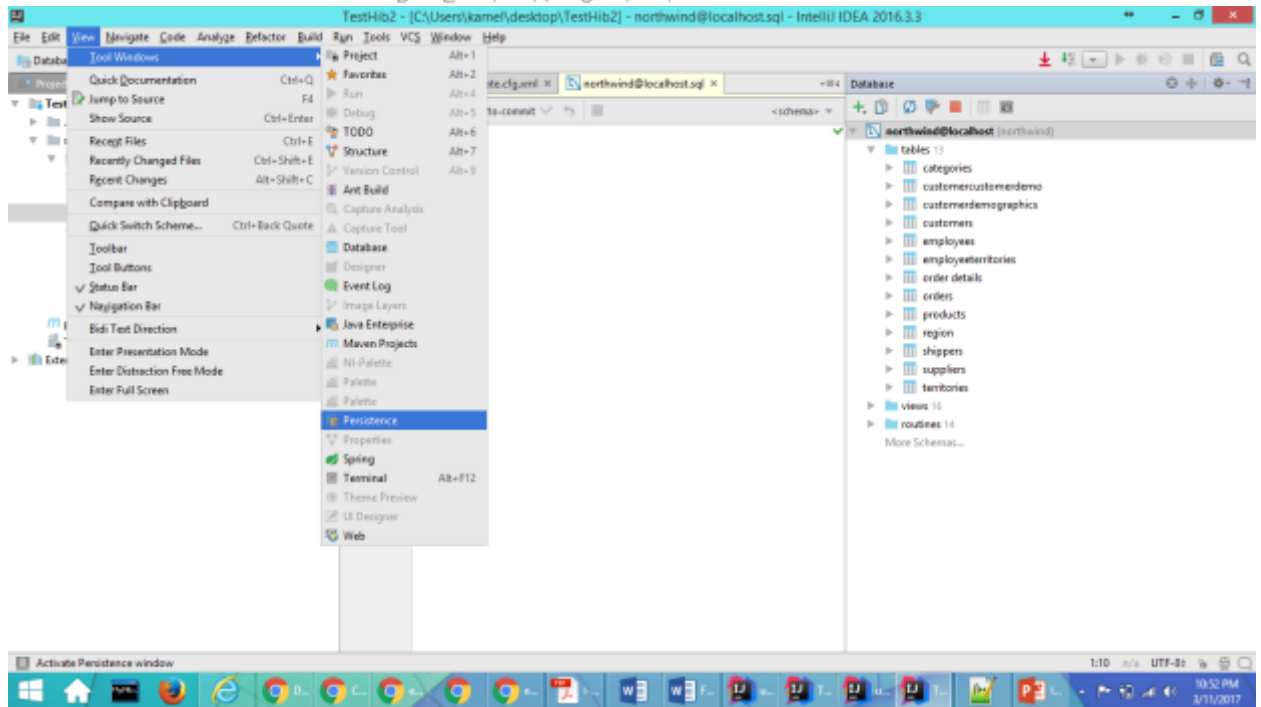
13. Press the Test Connection button to test if you can connect to the database. Click OK when you are done.
- Sometimes, you may see a button that asks you to Add the driver. Please click that button before testing the connection.



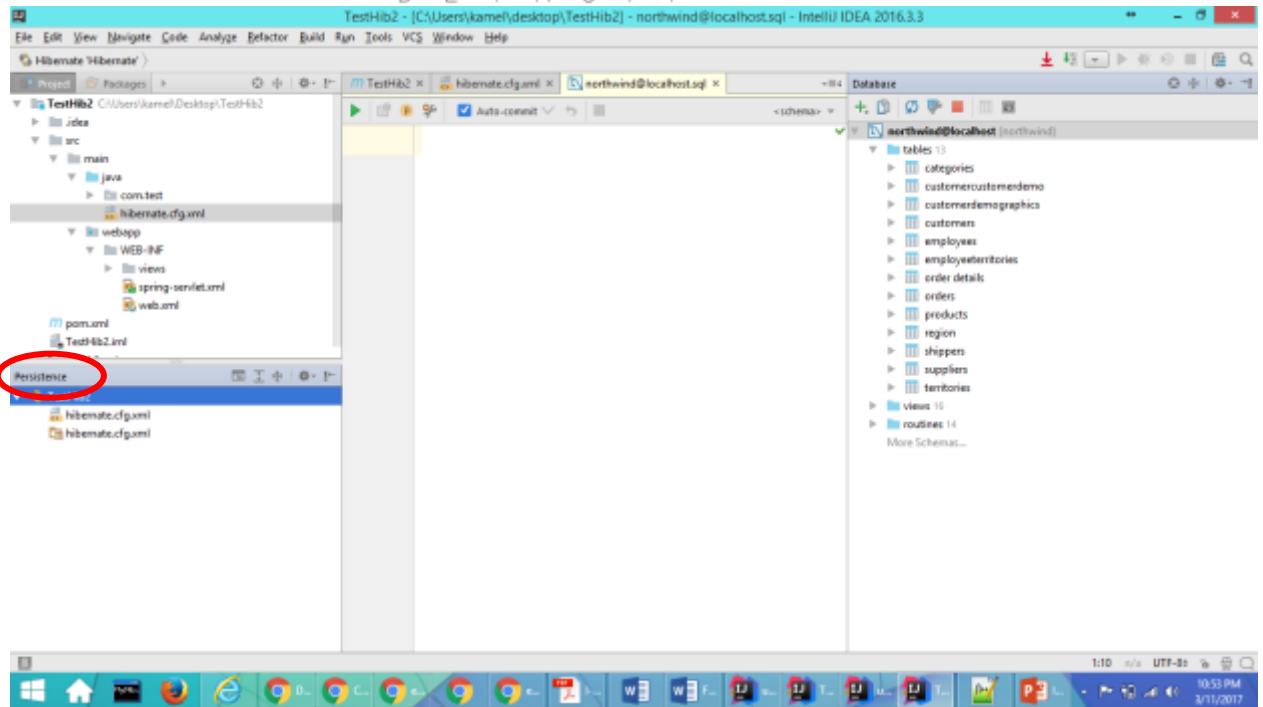
14. You can now see the tables from your database.



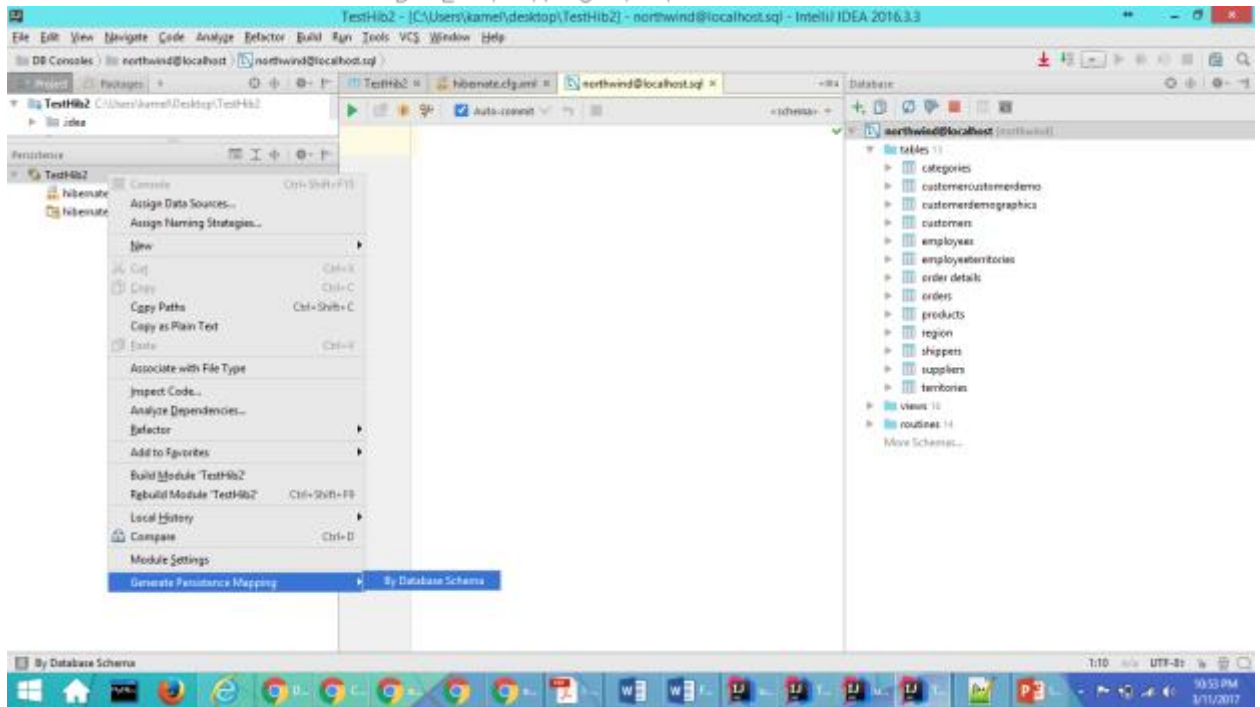
15. Go to View -> Tool Windows -> Persistence.



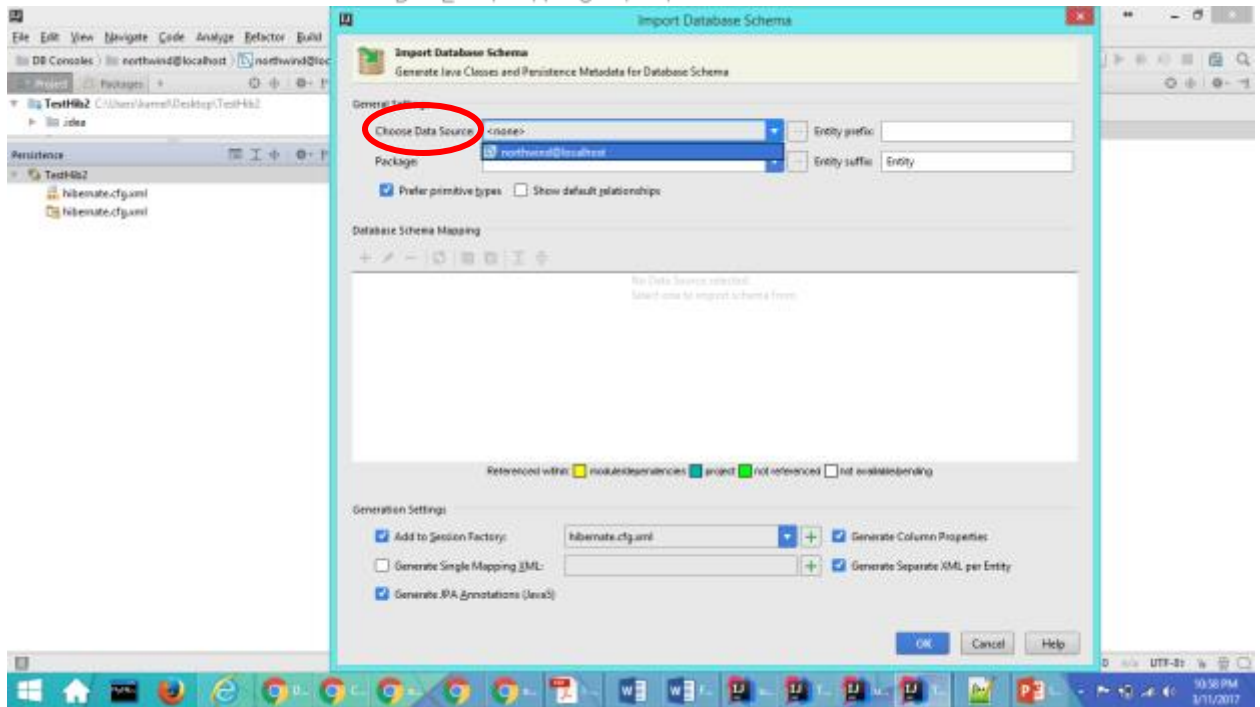
16. You will see a new window at the lower left corner.



17. Right click on the project's name in the Persistence window, then select Generate Persistence Mapping -> By Database Schema.



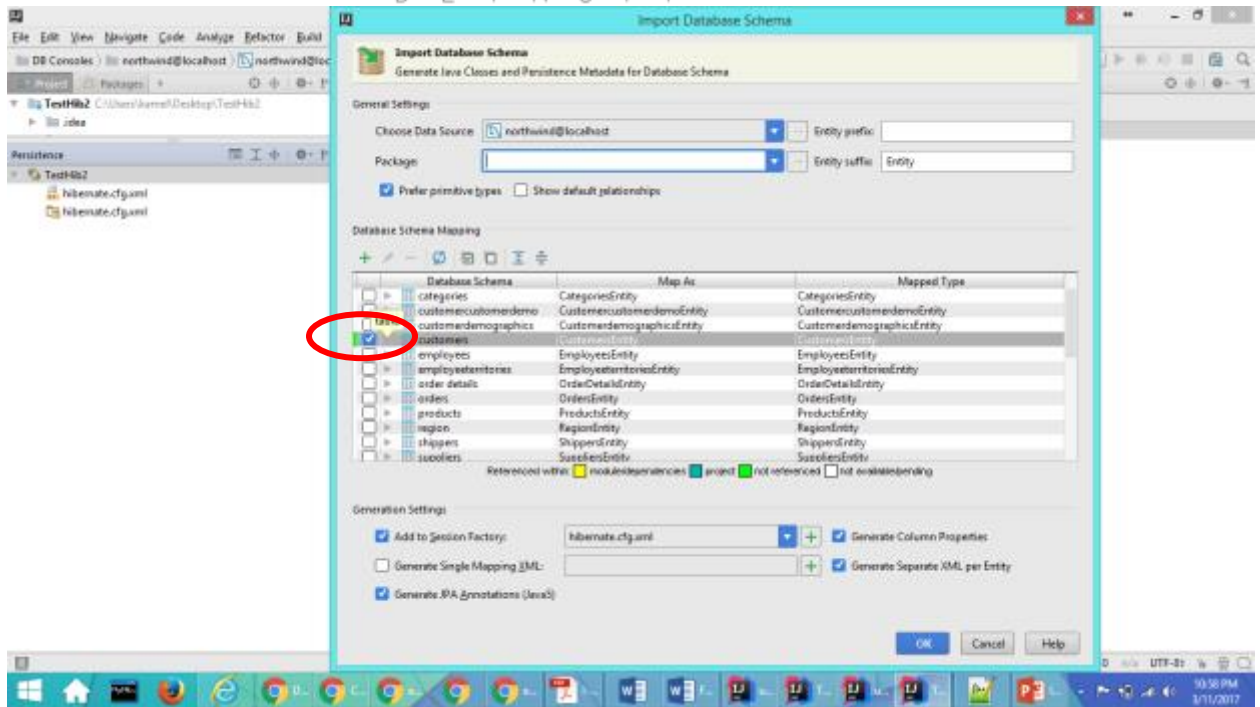
18. In the Import Database Schema window, choose the data source from the drop down box.



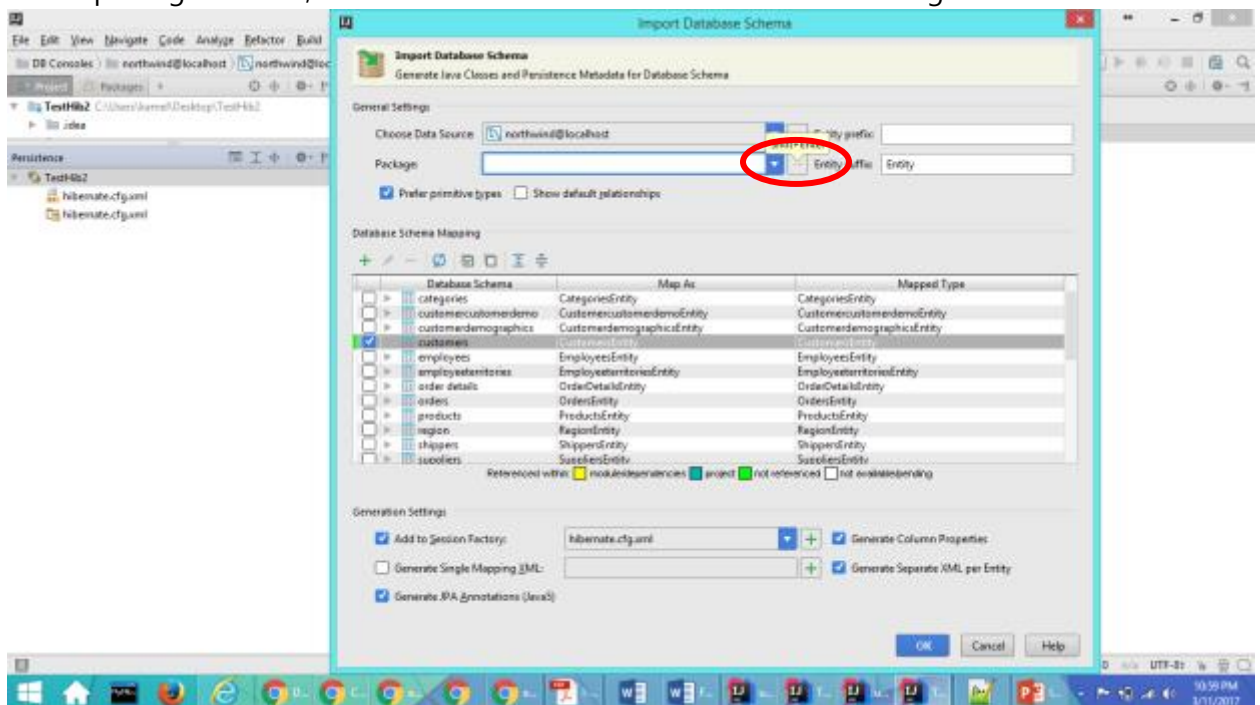
19. You can then select the customer table from the list of mappings.

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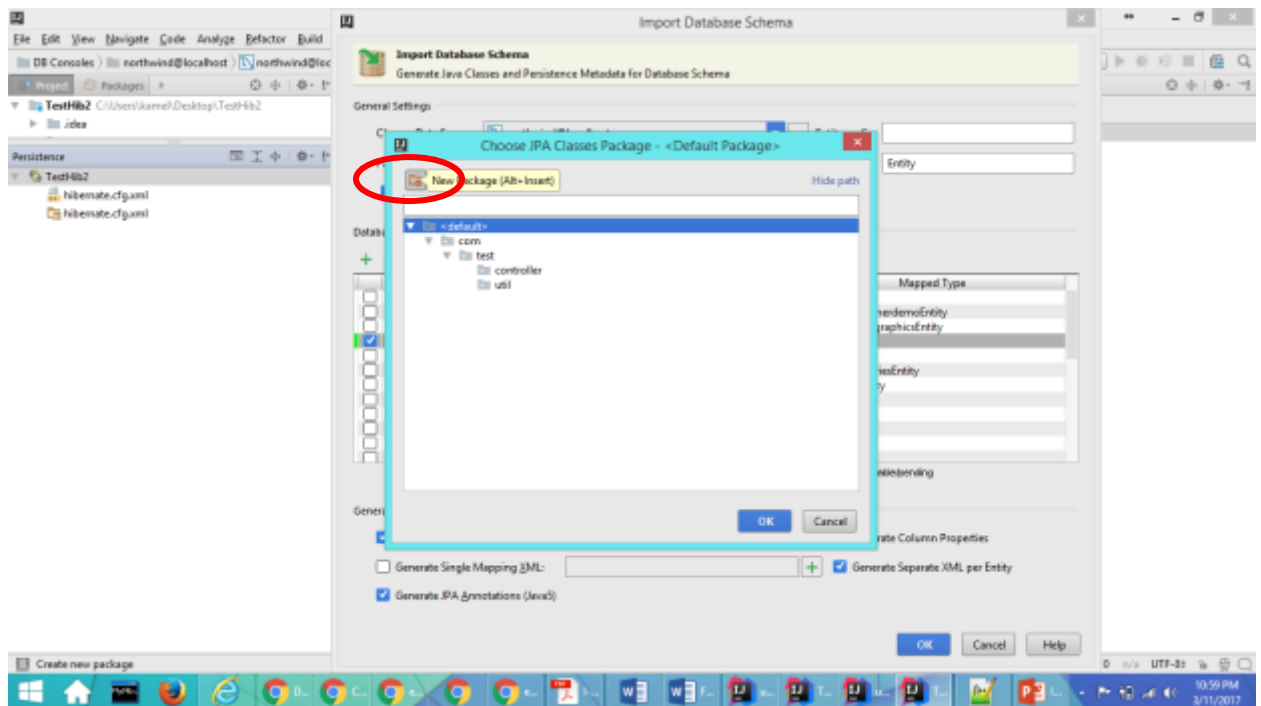


20. At the package textbox, click on the button with the three dots to the right.





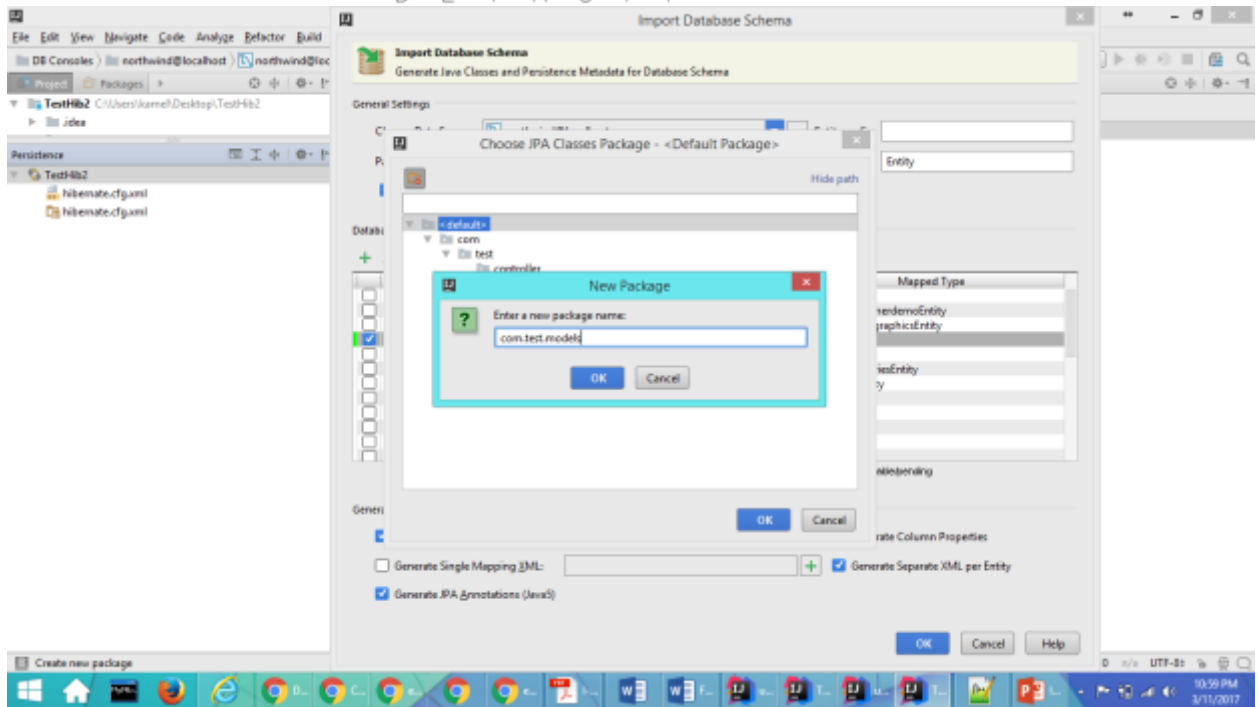
21. Create a new package.



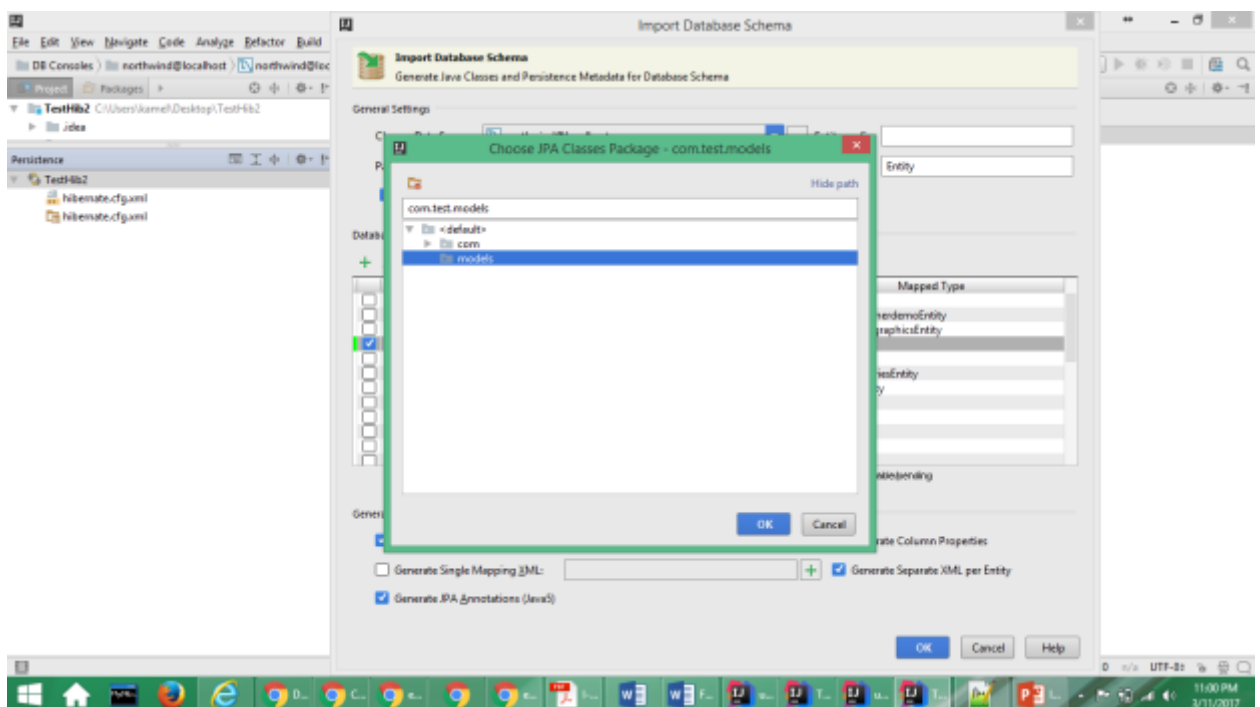
22. You can name the package: com.test.models.

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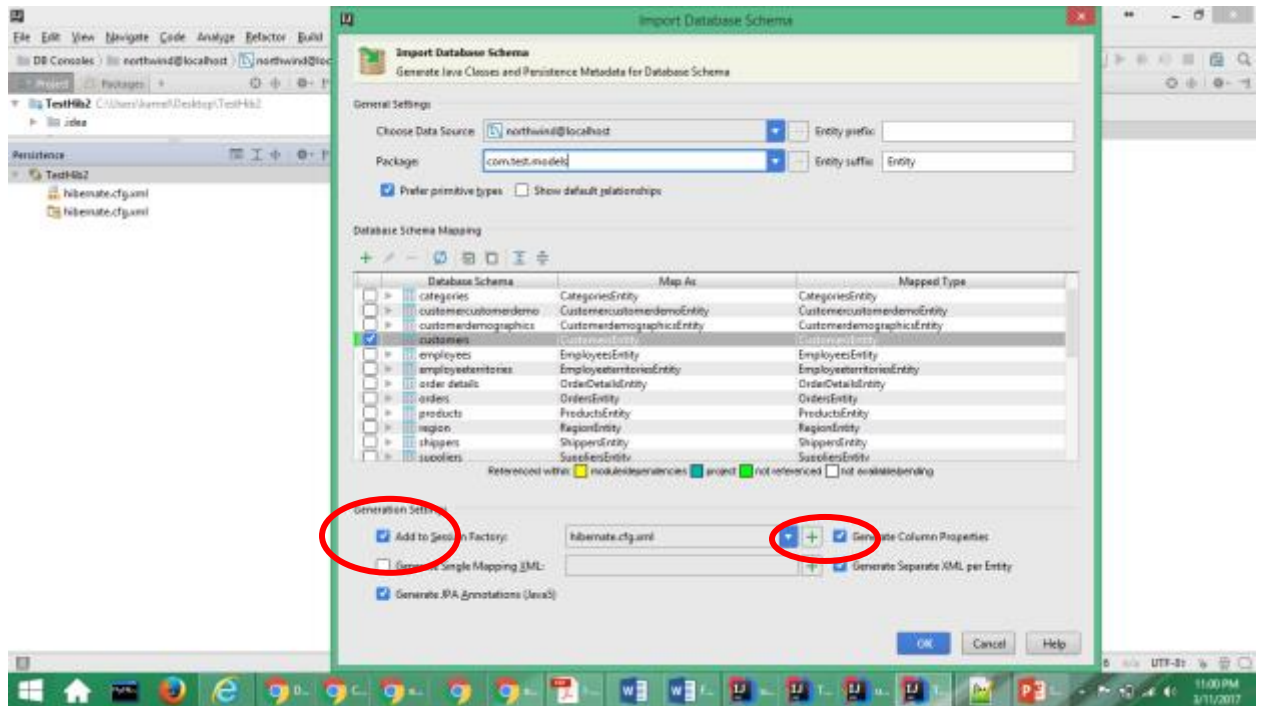


23. Click OK when done.





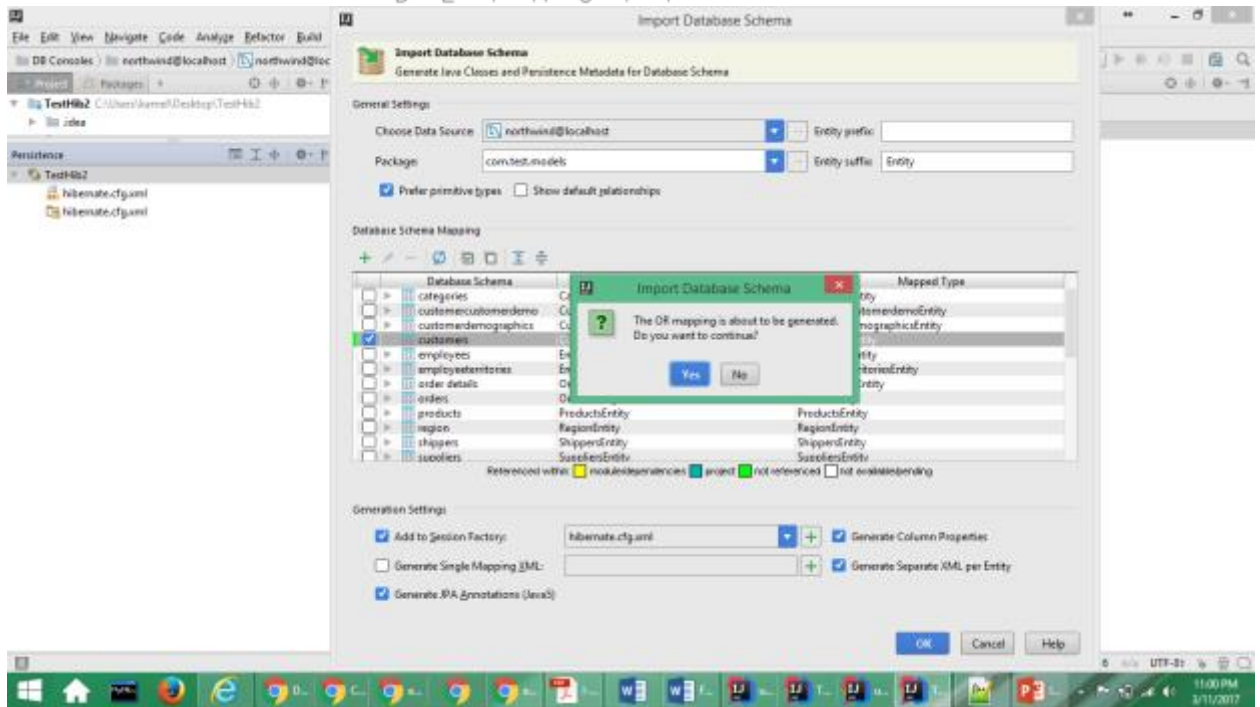
24. Be sure that the check boxes at the bottom of the window do match the next figure.



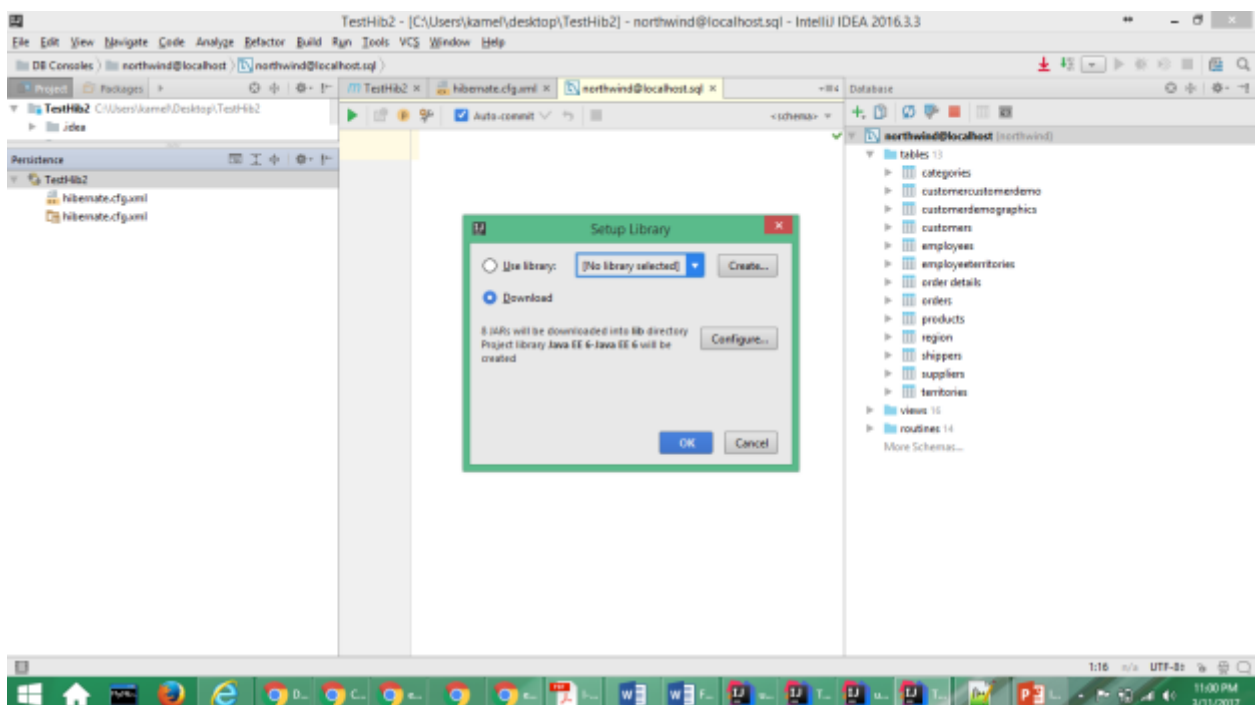
25. Click Yes.

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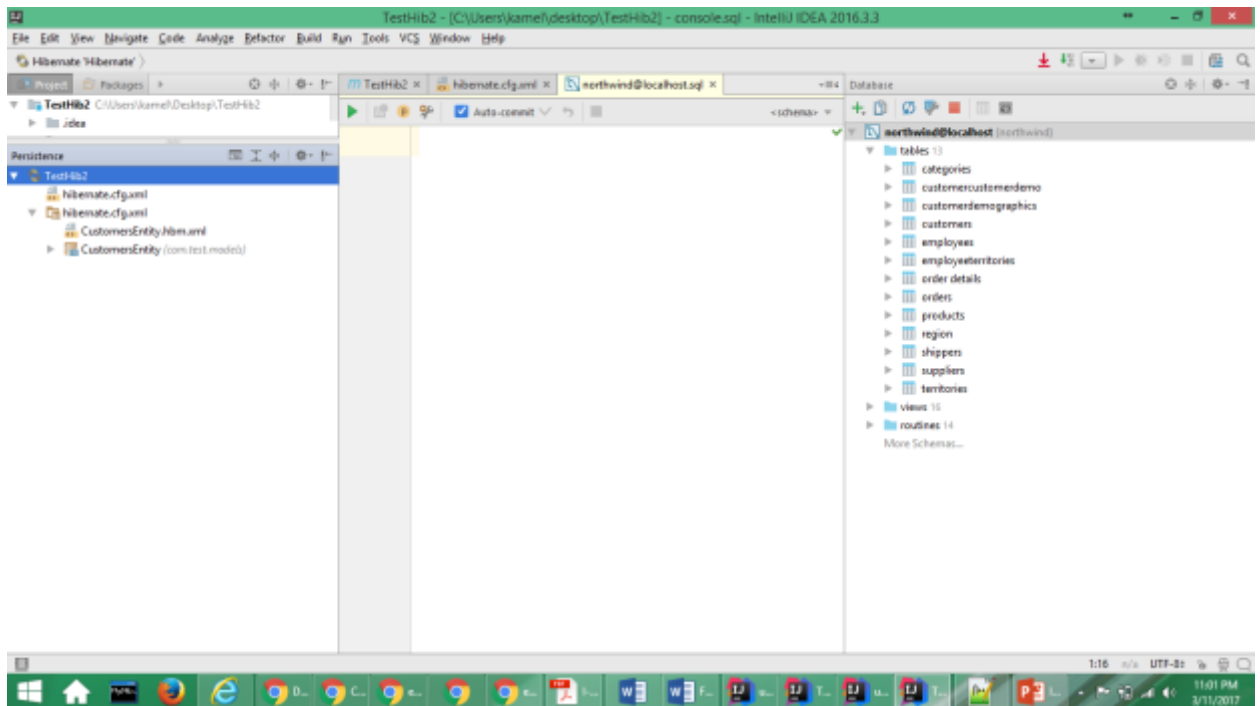


26. Click OK.





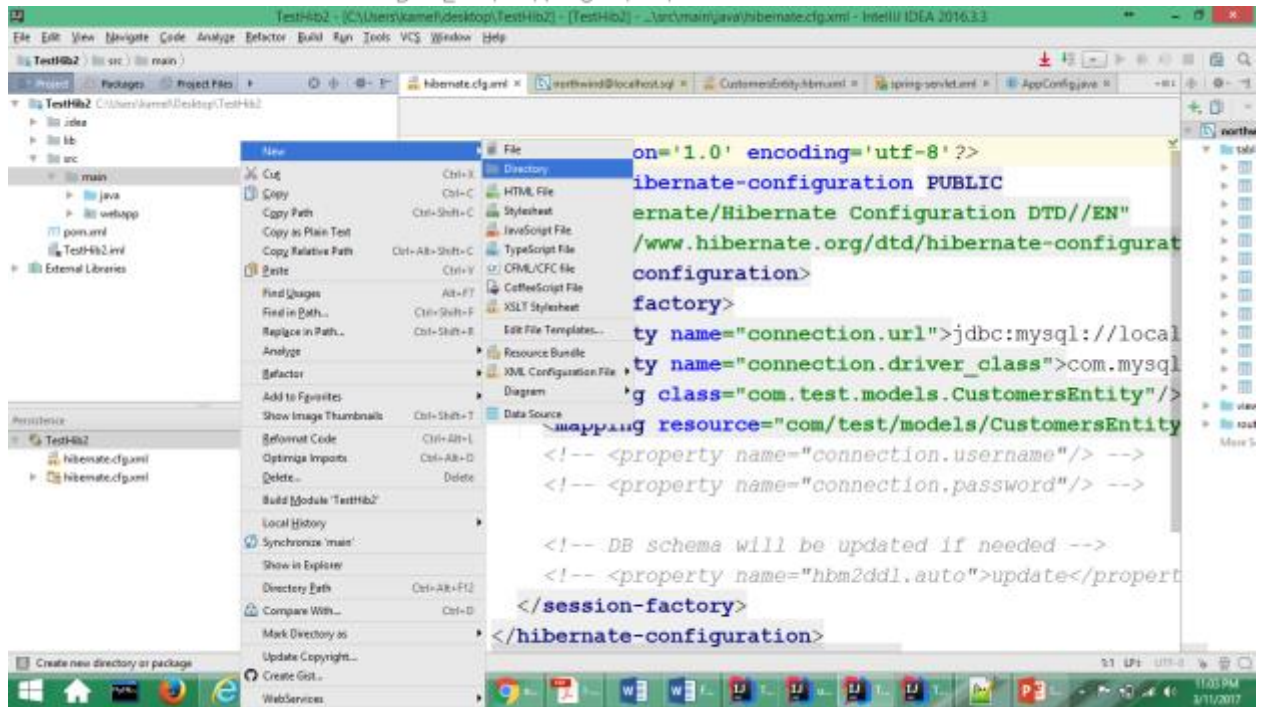
27. This is what you should see after you are done with the mappings.



28. Go to the project structure window, then right click on the main folder. Select New -> Directory. Name the new directory "resources".

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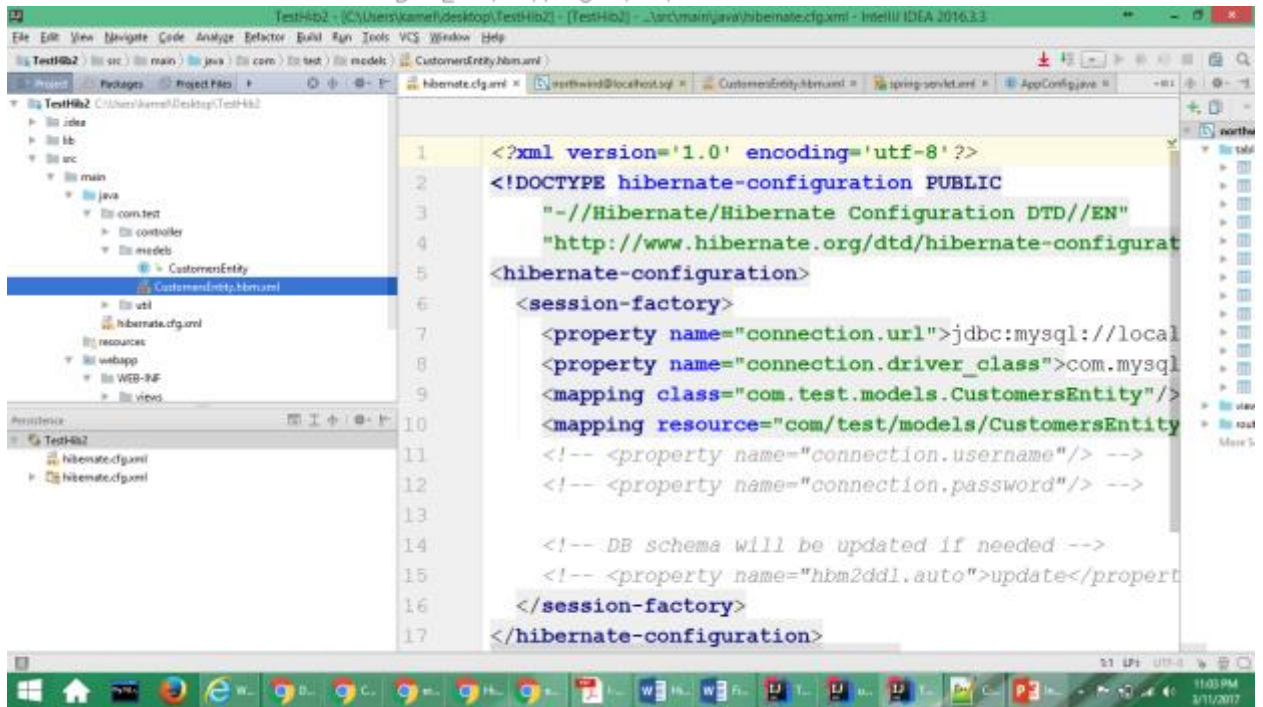
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29. Drag the `hibernate.cfg.xml` and the `CustomersEntity.hbm.xml` (under models) to the new resources directory.

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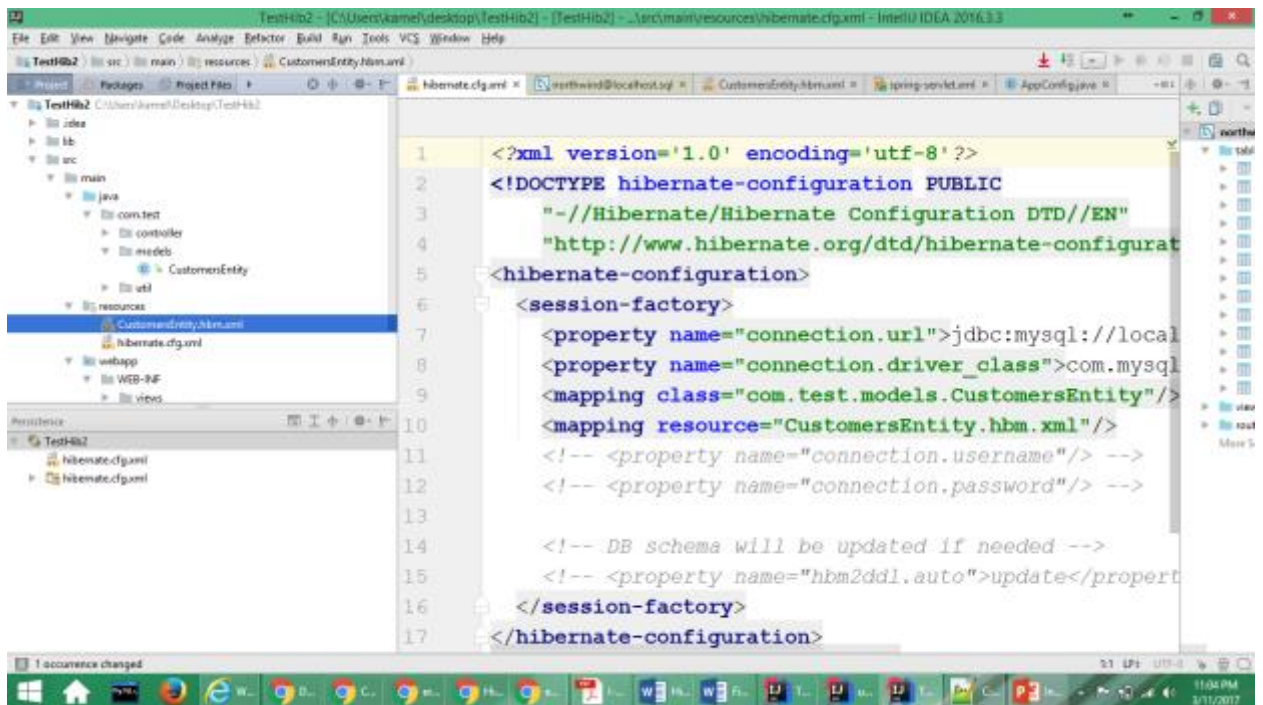
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```

1  <?xml version='1.0' encoding='utf-8'?>
2  <!DOCTYPE hibernate-configuration PUBLIC
3      "-//Hibernate/Hibernate Configuration DTD//EN"
4      "http://www.hibernate.org/dtd/hibernate-configuration"//>
5  <hibernate-configuration>
6      <session-factory>
7          <property name="connection.url">jdbc:mysql://localhost:3306/testhib2</property>
8          <property name="connection.driver_class">com.mysql.jdbc.Driver</property>
9          <mapping class="com.test.models.CustomerEntity"/>
10         <!-- <property name="connection.username">root</property> -->
11         <!-- <property name="connection.password">root</property> -->
12
13         <!-- DB schema will be updated if needed -->
14         <!-- <property name="hibernate.hbm2ddl.auto">update</property> -->
15     </session-factory>
16 </hibernate-configuration>

```



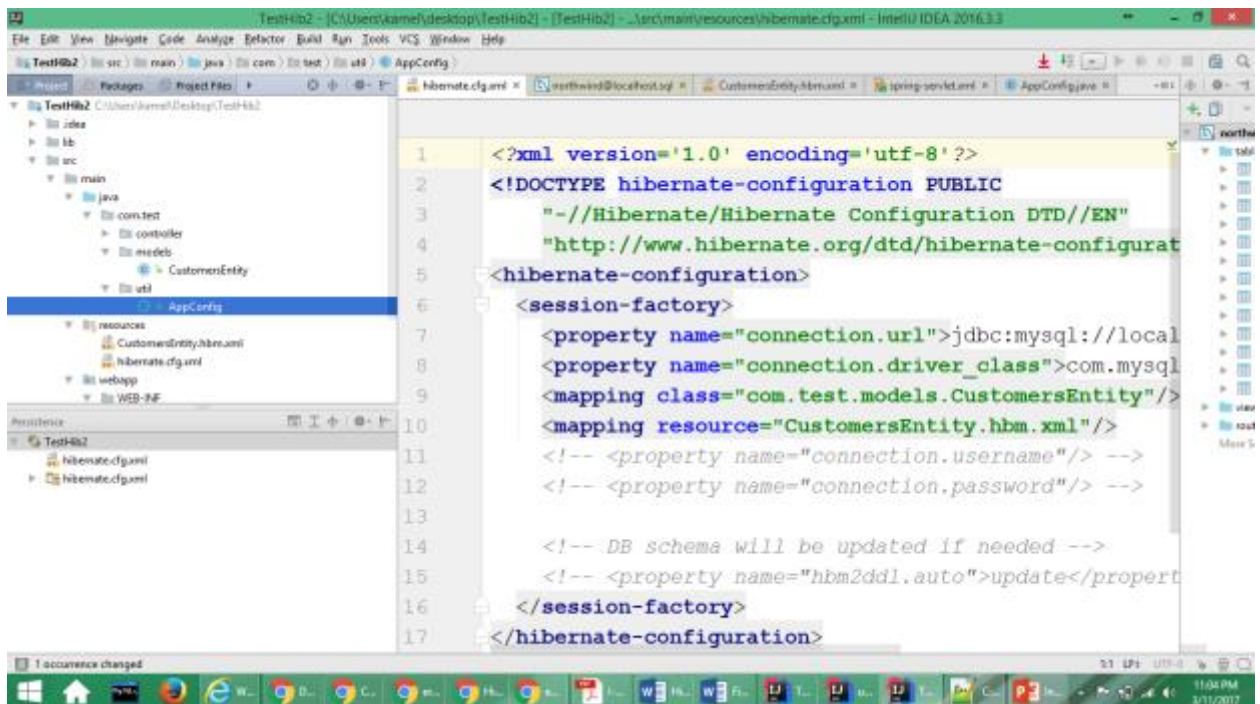
```

1  <?xml version='1.0' encoding='utf-8'?>
2  <!DOCTYPE hibernate-configuration PUBLIC
3      "-//Hibernate/Hibernate Configuration DTD//EN"
4      "http://www.hibernate.org/dtd/hibernate-configuration"//>
5  <hibernate-configuration>
6      <session-factory>
7          <property name="connection.url">jdbc:mysql://localhost:3306/testhib2</property>
8          <property name="connection.driver_class">com.mysql.jdbc.Driver</property>
9          <mapping class="com.test.models.CustomerEntity"/>
10         <mapping resource="CustomerEntity.hbm.xml"/>
11         <!-- <property name="connection.username">root</property> -->
12         <!-- <property name="connection.password">root</property> -->
13
14         <!-- DB schema will be updated if needed -->
15         <!-- <property name="hibernate.hbm2ddl.auto">update</property> -->
16     </session-factory>
17 </hibernate-configuration>

```



30. Go to the App.Config class under the util package.



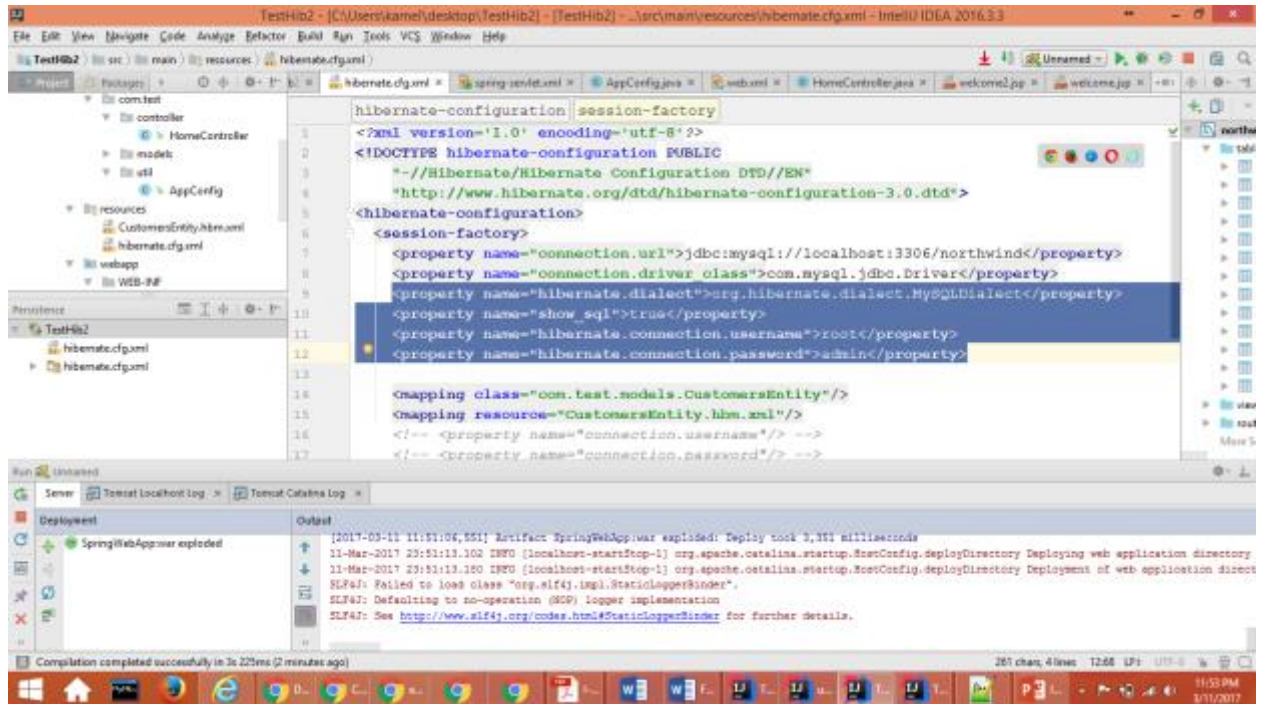
Add the following to the AppConfig class:

```
@Override
public void addResourceHandlers(ResourceHandlerRegistry
registry) {

    registry.addResourceHandler("/resources/**").addResourceLocations("/resources/");
}
```




31. Add your username, password, and dialect to the hibernate.cfg.xml



Be sure they username and password are added before the mapping tags.

32. Add the following to your controller to test hibernate

```
@RequestMapping("listCustomers")

public ModelAndView listCustomer()
{
    Configuration cfg = new
    Configuration().configure("hibernate.cfg.xml");

    SessionFactory sessionFact = cfg.buildSessionFactory();

    Session selectCustomers = sessionFact.openSession();
```



```
selectCustomers.beginTransaction();

Criteria c =
selectCustomers.createCriteria(CustomersEntity.class);

ArrayList<CustomersEntity>
customerList=(ArrayList<CustomersEntity>)c.list();

return new
    ModelAndView("welcome2","cList",customerList);
```

Add the following imports at the top of the HomeController class:

```
import org.hibernate.*;

import org.hibernate.cfg.Configuration;
```

33. Modify welcome2.jsp to be:

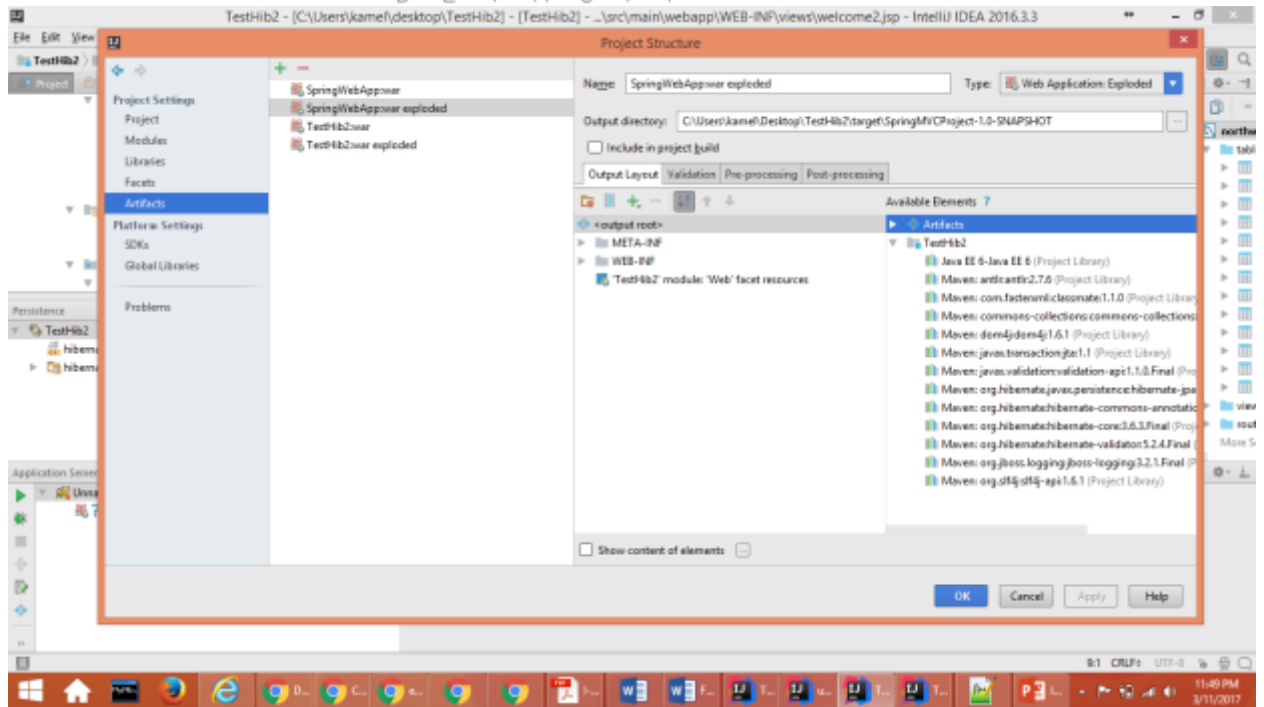
```
<%@ page contentType="text/html; charset=UTF-8"
language="java" %>
<%@ taglib uri="http://java.sun.com/jsp/jstl/core"
prefix="c"%>
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01
Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
    <meta http-equiv="Content-Type" content="text/html;
```



```
charset=ISO-8859-1">
    <title>Insert title here</title>
</head>

<table border=1>
    <c:forEach var="myvar" items="${cList}">
        <tr>
            <td> ${myvar.customerId}</td>
            <td> ${myvar.companyName}</td>
        </tr>
    </c:forEach>
</table>
</body>
</html>
```

34. Check Artifacts under WebApp WAR exploded (this is under the project structure window)



Select all the libraries under the project name, then select put to WEB-INF/lib.

