Setup guide

Exercise 1 Part 1

Downloads

Eclipse: http://www.eclipse.org/downloads/packages/eclipse-ide-java-ee-developers/keplerr
Glassfish: http://download.java.net/glassfish/4.0/release/glassfish-4.0.zip
MySQL Connector/J: http://dev.mysql.com/downloads/connector/j/

Glassfish

Unzip the zip-file, and place your glassfish installation folder where you want it. We will call this folder GLASSFISH_INSTALL. Open a terminal and run the following command:

- GLASSFISH_INSTALL/bin/asadmin start-domain

Open the admin interface in a browser: http://localhost:4848/

See https://glassfish.java.net/docs/4.0/quick-start-guide.pdf for more if you want to play around.

MySQL

Create a database with this tutorial:
https://innsida.ntnu.no/wiki/-/wiki/English/Using+MySQL+at+NTNU or configure a local MySQL server. If doing the latter, remember to give the root@localhost user a password.

If using NTNUs MySQL server: To create the new tables the easiest way is to use PHPmyAdmin which can be found at https://mysqladmin.stud.ntnu.no/. Log into the new database you just created. Select the database you created in the menu to the left. Click the "SQL" tab at the top. Select a text file and choose the setup.sql file. Then click go and the tables will be created in the database for you.

JDBC

Follow the steps in this setup guide:
http://dev.mysql.com/doc/refman/5.1/en/connector-j-usagenotes-glassfish-config.html
When creating a JDBC Resource in Glassfish, give it the JNDI name `jdbc/bookstore`

When filling in the additional properties, start by selecting ALL properties, and **deleting** them, then add ONLY the following.

DatabaseName	YOUR_DATABASE_NAME
Password	YOUR_SQL_USER_PASSWORD
Port	3306
ServerName	mysql.stud.ntnu.no
User	YOUR_SQL_USERNAME

The actual values above will depend on the choices you made when setting up your SQL database in the previous step. Do not forget to setup the JDBC Resource as detailed at the bottom of the guide above.

Deploying

To deploy the webapp you can now open a terminal and run the following command, replacing the PATH_TO_WAR_FILE with the path to "bookstore.war":

- GLASSFISH_INSTALL/bin/asadmin deploy PATH_TO_WAR_FILE

The application should now run at http://localhost:8080/ and you should be all set up to do part 1 of the exercise. If you want to deploy the webapp using a web GUI, see https://glassfish.java.net/docs/4.0/quick-start-guide.pdf for details..

Exercise 1 Part 2

Eclipse

Eclipse does not come with Glassfish support, but it is easy to add:

1. Open the Servers view through **Window** -> **Show View** -> **Servers**.
2. Right-click in the Servers view and select **New** -> **Server**.
3. Click "Download additional server adapters" in the top-right and install the "Oracle Glassfish Server Tools" module.

Create a new server instance through the Servers view, by right-clicking and selecting **New** -> **Server**. Choose Glassfish 4.0. Then we are prompted for the installation directory of the server (GLASSFISH_INSTALL).

Eclipse Project

In the Project Explorer in Eclipse, right click and press "Import" -> "WAR File". Select the WAR-file you downloaded from It's Learning. Target runtime should be set to "Glassfish 4.0". Click "Finish".

Running the application

To run the application, right click on the project folder in Eclipse and click "Run As" -> "Run on Server". Select the Glassfish Server and click finish.

The application should now run at http://localhost:8080/

General tips for development

Use a version control system such as Git or Subversion (SVN). Do not use Dropbox to share the code between developers unless you want a mess.

If you want to learn how to use Git, check out this online book: http://git-scm.com/book
Also, there are many excellent resources on http://www.github.com/

NTNU has a guide to Subversion here:
http://www.ntnu.no/itinfo/programvare/versjonskontroll/svn.html