



SOFTWARE ENGINEERING 2

TEACHER:
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GuessBid

Installation
Guide
Document

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1. Required Software

Required software that have to be installed on your device in order to permit the correctly running of the application:

- JDK 1.8+ (<http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>)
- Glassfish 4.1 (<https://glassfish.java.net/download.html>)
- MySql Community Server (<http://dev.mysql.com/downloads/mysql/>)
- MySql Java connector (<http://dev.mysql.com/downloads/connector/j/>)

Optional (we used it), but not mandatory: NetBeans IDE 8.0.2

2. Installation tutorial

Once the components have been installed execute MySQL from terminal, starting MySQL server.

Enter your root password and follow the next steps:

- Create the database (we named it “guessbid”);
- create user 'guessbid_user'@'localhost' identified by 'password' grant all on guessbid.* to 'guessbid_user'@'localhost';
- Then place mysql-connector-java-5.1.34-bin.jar (extracted from the MySql Java connector) in the folder %Glassfish installation folder%\glassfish\modules;
- Start the Glassfish server; this can be done by command line or in an IDE, for example Netbeans 8.0.2, that we will use in this tutorial.

Go to the Services tab, under the voice Servers and follow the visual instruction from these screens:



If GlassFish server is not present in “Servers”, click on Add Server and select GlassFish Server from available servers

Add Server Instance

Steps

1. Choose Server

2. ...

Choose Server

Server:

Apache Tomcat or TomEE

GlassFish Server

JBoss Application Server

Oracle WebLogic Server

WildFly Application Server

Name:

GlassFish Server (1)

< Back

Next >

Finish

Cancel

Help

Add Server Instance

Steps

1. Choose Server

2. Server Location

3. Domain Name/Location

Domain Location

Domain:

guessbid domain

Host:

localhost

☒ Loopback

DAS Port:

4848

HTTP Port:

8080

☒ Default

Target:

User Name:

Password:

Create new embedded domain: guessbid domain

< Back

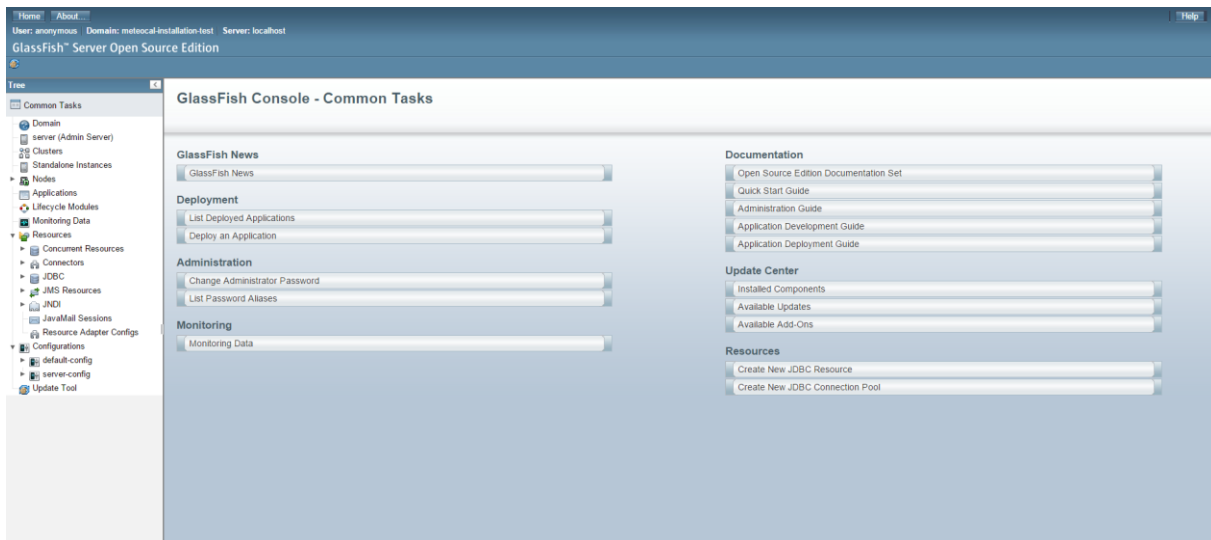
Next >

Finish

Cancel

Help

Confirm and wait for the domain creation, then click on the new server and select “View Domain Admin Console”, that will open a page like the following in the browser.



Then, click on -> Resources/JDBC Connection Pools, choose to create a new one and enter the following data:

New JDBC Connection Pool (Step 1 of 2)

Identify the general settings for the connection pool.

General Settings

Pool Name: *

Resource Type:
Must be specified if the datasource class implements more than 1 of the interface.

Database Driver Vendor:
Select or enter a database driver vendor

Introspect: ☒ Enabled
If enabled, data source or driver implementation class names will enable introspection.

Clicking on “Additional Properties” you can add more properties about this resource, in particular choose these fields and the correspondent values:

ServerName : localhost
 Port: 3306
 DatabaseName: guessbid
 User: your user
 Password: your password

Then click on “Finish” to create the connection pool and check if the ping succeeded.

After that, you have to create a new JDBC resource, entering the following values:

New JDBC Resource

Specify a unique JNDI name that identifies the JDBC resource you want to create. The name must contain only alphanumeric, underscore, dash, or dot characters.

JNDI Name: *

Pool Name: ▼
Use the [JDBC Connection Pools](#) page to create new pools

Description:

Status: ☒ Enabled

Additional Properties (0)			
Add Property		Delete Properties	
Select	Name	Value	Description
No items found.			

Replace the Pool Name with the name of the pool previously created and confirm.

The next step involve the creation of a realm in order to authenticate on Guessbid, so under Configurations > server-config > Security > Realms, create a new Realm with the following data:

New Realm

Create a new security (authentication) realm. Valid realm types are PAM, OSGi, File, Certificate, LDAP, JDBC, Digest, Oracle Solaris, and Custom.

Configuration Name: server-config

Name: *

Class Name: ☒ com.sun.enterprise.security.auth.realm.jdbc.JDBCRealm ▼
☐
Choose a realm class name from the drop-down list or specify a custom class

Properties specific to this Class

JAAS Context: *
Identifier for the login module to use for this realm

JNDI: *
JNDI name of the JDBC resource used by this realm

User Table: *
Name of the database table that contains the list of authorized users for this realm

User Name Column: *
Name of the column in the user table that contains the list of user names

Password Column: *
Name of the column in the user table that contains the user passwords

Group Table: *
Name of the database table that contains the list of groups for this realm

Group Table User Name Column:
Name of the column in the user group table that contains the list of groups for this realm

Group Name Column: *
Name of the column in the group table that contains the list of group names

Password Encryption Algorithm: *
This denotes the algorithm for encrypting the passwords in the database. It is a security risk to leave this field empty.

(Replace description values with correspondent values in your db)

You should now be ready to deploy the provided war file and test our platform.

To deploy the application go under Application and choose “Deploy”:

Then upload the provided “guessbidproject”.war file and set the following data:

Type: Web Application

Context Root: guessbidproject

Application Name: guessbidproject

Then, on the applications page you should be able to Launch the application and use it successfully.

3. Using the source code

To open the source code provided in the guessbid.zip file, extract the zip file and, in Netbeans, choose “Open Project”, navigate to the extraction folder and select the project folder.

Make sure to have “Open Required Projects” selected.