MY METEO CAL

USER INSTALLATION MANUAL

In order to make the application function properly, there are a few steps that must be executed by the final utilizer. First of all, if not present already on the server, there's the necessity of preparing the right enviroment following these steps:

- Download, install and configure the MySQL Server from http://dev.mysql.com/downloads/mysql/ choosing your operative system and following the instructions on screen.
- Download and install on your computer the latest version of Java from https://www.java.com/it/download/
- Install the GlassFish Server on your computer.

After the last step, the Glassfish server needs to be configured in order to run the application. These are the operations to perform:

1. Start the server through your favourite IDE or through CLI:

- From Netbeans:
    - Services tab -> Right click on Servers -> add server...
    - Services tab -> Right click on Glassfish Server -> Start/Stop
- From Eclipse:
    - Servers tab -> Right click -> New -> Server...
    - Servers tab -> Right click on Glassfish -> Start/Stop
- From CLI:
    - glassfish/bin/asadmin start-domain
    - glassfish/bin/asadmin stop-domain

2. Start the mySQL server following these instrcutions:
    i. On Windows: http://dev.mysql.com/doc/mysql-startstop-excerpt/5.7/en/windows-server-first-start.html
    ii. On Linux/OSX:
    ```
    sudo /usr/local/mysql/support-files/mysql.server
    [start|stop|restart]
    ```
3. Create a new database from IDE, mySQL Workbench or also CLI. (e.g. mydb)

4. Download MySQL Connector/J

5. Follow these instructions to install the library, open the GlassfishDomainConsole and create a MySql connection pool with the following additional properties:
    a. DatabaseName: mydb
    b. User: root (or any user granted access to the db)
    c. Password: the root password
    d. URL: the url to the resource(e.g. jdbc:mysql://localhost:3306/mydb)

e. Under the JDBC resources create a new resource called jdbc/myMeteoCal and assign the MySql pool that you have just created.
f. ServerName: localhost

6. Follow these steps for creating a JDBCRealm:

- o enter Glassfish control panel
- o Configurations -> server-config -> security -> Realms -> new...
- o Use the following configuration:
- o Realm Name: jdbcRealmMyMeteoCal
- o Class name: JDBCRealm
- o JAAS Context: jdbcRealm
- o JNDI: jdbc/myMeteoCal
- o User Table: users
- o User Name Column: USERNAME
- o Password Column: PASSWORD
- o Group Table: users
- o Group Table User Name Column: USERNAME
- o Group Name Column: GROUPNAME
- o Password Encryption Algorithm: MD5
- o Digest Algorithm: SHA-256
- o Server restart may be required

7. Create a new Java Mail Session by going to Resources -> Java Mail Session -> new... and set the following parameters:
   - JNDI Name: mail/MyMeteoCalMail
   - Mail Host: smtp.gmail.com.
   - Default User: meteocal.ejb@gmail.com
   - Default Sender Address: meteocal.ejb@gmail.com
   - Transport Protocol: smtps

- Transport Protocol Class: com.sun.mail.smtp.SMTPSSLTransport
- Add the following two properties:
  - mail-smtps-password: mymeteocal
  - mail-smtps-auth: true

Now you are ready to deploy the .war file on the server and run the application, we hope you enjoy!