Install guide MD - Server part

Overview

Requirements are:

- Install java jdk 1.7 and above
- Mysql 5 and above
- Apache Maven
- Application Server
- LoanPortal Project download

Install Java JDK 1.8 or 1.7

Go to the Oracle Java download site and select to download the Java Developer Kit (JDK) 8, latest update. The url is http://www.oracle.com/technetwork/java/javase/downloads/index.html

Install MySql

Mysql install instructions can be found here: https://dev.mysql.com/doc/refman/5.7/en/installing.html

Setup MySql database or other database.

Simply run the loan.sql script found in "marketdatabase/db" on your database server.

Depending on the application server that you are using, you will need to set up a mysql connection pool and JNDI on the application server to select the physical database to use for the Market Database.

Install Apache Maven

Apache Maven and install instructions can be found here https://maven.apache.org/install.html

Install an Application server

This a developers choice but Glassfish 0r Apache tomcat should work.

Download MarketDatabase tool source code

Download a zip file of the source code from https://villagepowerltd.github.io/oss-public/ and unzip to a location of your choice on the computer.

Pom.xml needed by maven is found in "marketdatabase/server/" folder, this is where you will execute maven commands.

Once maven is installed, simply run the following commands in the above folder.

mvn package

```
you should see a [INFO] BUILD SUCCESSFUL message after running the command
```

You should now have a .war file in server/target named something similar to loanPortal-1.0-SNAPSHOT.war or marketDatabase-1.0-SNAPSHOT.war

This is the file that should be dropped at the Applications sector of your Application server.

Source code is located in this path "marketdatabase/server/src/main/java" of the unzipped location of the project download.

Application startup

▪ Once application is dropped in Applications sector, you can access it through the server public address for example:

http://localhost:9090/marketDatabase-1.0-SNAPSHOT

Note: the port number that you have configured the application on eg. 9090 and server name localhost.

Note: SNAPSHOT will usually refer to a development version meant for small development builds, in order to build an actual RELEASE version, you will need to modify your POM.xml file to include a maven-release-plugin. Instructions on how to do this will be found at this url:

https://maven.apache.org/guides/mini/guide-releasing.html
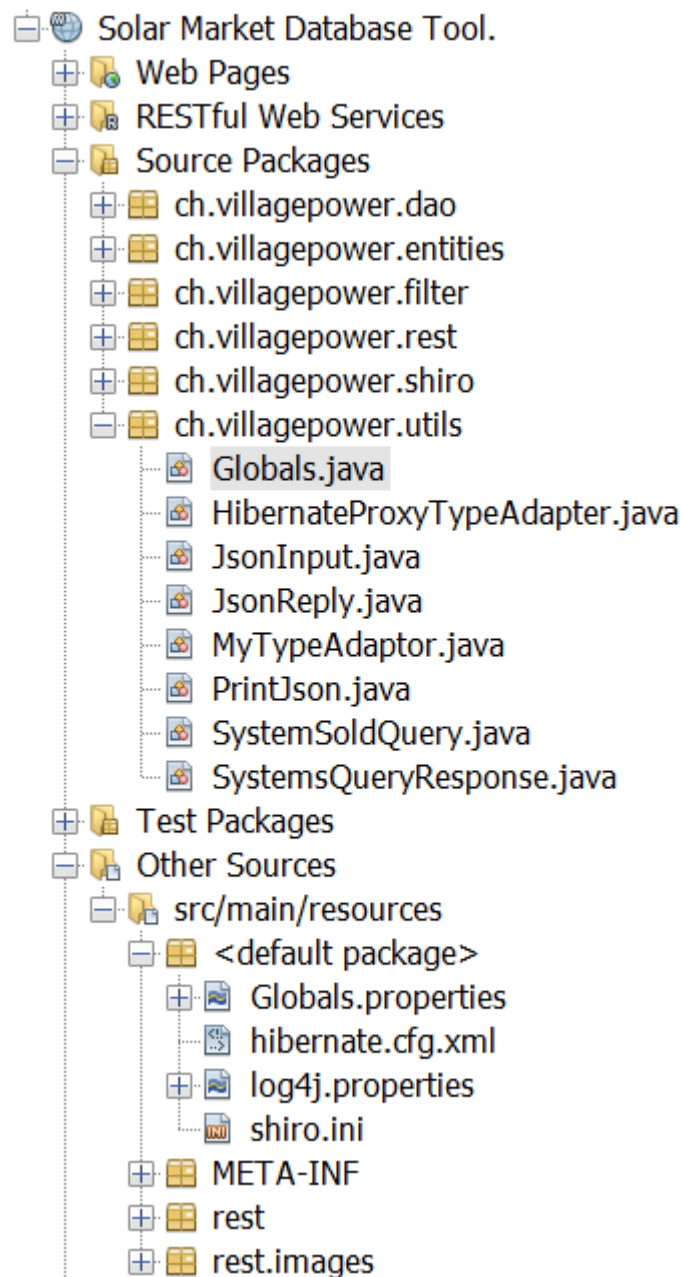
Checking the logs

Depending on the application server you are using for the application web service endpoints, you will need to look at the documentation of your respective application server and find the log files from which you will find error messages that have arisen due to network connectivity(the reason is if it's a network connectivity error the message may never reach the UI of the application but the error messages will be logged to the server logs) and you can then use these messages to trouble shoot.

Success/Unsuccessful messages

In section with sample data for REQUEST and RESPONSE you will realize that whenever an action was successful you will receive a response that has a 'true' and 'false' for unsuccessful in the result flag of the returned json.

Email Customization

In package named 'utils' you should find a java file called 'PrintJson.java' within which you will be able to edit all the details concerning the email being sent to the user of the application e.g: message body, subject, content type etc. Emails you will be able to edit are those with details of user registration sent to user, charts assignment to users etc. see image below:

```
⊟ 🌐 Solar Market Database Tool.
    ⊞ 📁 Web Pages
    ⊞ 📁 RESTful Web Services
    ⊟ 📁 Source Packages
        ⊞ 📦 ch.villagepower.dao
        ⊞ 📦 ch.villagepower.entities
        ⊞ 📦 ch.villagepower.filter
        ⊞ 📦 ch.villagepower.rest
        ⊞ 📦 ch.villagepower.shiro
        ⊟ 📦 ch.villagepower.utils
            ─ 📄 Globals.java
            ─ 📄 HibernateProxyTypeAdapter.java
            ─ 📄 JsonInput.java
            ─ 📄 JsonReply.java
            ─ 📄 MyTypeAdaptor.java
            ─ 📄 PrintJson.java
            ─ 📄 SystemSoldQuery.java
            ─ 📄 SystemsQueryResponse.java
    ⊞ 📁 Test Packages
    ⊟ 📁 Other Sources
        ⊟ 📁 src/main/resources
            ⊟ 📦 <default package>
                ⊞ 📄 Globals.properties
                ─ 📄 hibernate.cfg.xml
                ⊞ 📄 log4j.properties
                ─ 📄 shiro.ini
            ⊞ 📦 META-INF
            ⊞ 📦 rest
            ⊞ 📦 rest.images
```

In folder src/main/resources there is a file called 'Globals.properties' with sample data below:

DB_URL = jdbc:mysql://localhost:3306/loan

DB_USERNAME = dbuser

DB_PASSWORD = dbpassword

MAIL_USERNAME = loanportal@village-power.ch

MAIL_PASSWORD = yourpassword

MAIL_SMTP_HOST = smtp.udag.de

MAIL_SMTP_PORT = 25

MAIL_REGISTRATION_SITE_LINK = http://localhost/VerifyRegisteredEmailHash.html

SALT = $2||||||||||||||||CyKaJ40hslrk5fe

These settings enable you to configure your email server that will relay the messages.

Endpoint Description

Description of endpoints and expected data can be found by running this url on the just installed application

http://localhost:port/marketDatabase-1.0-SNAPSHOT/swagger.json

Note: server and port addresses as configured on your servers. Here you will find a description of the actual endpoint, required data input, their data types, valid media type and access security level.

Sample data sets

REQUEST:

Endpoint url: http:// localhost:port /webresources/company/addCompany

Media type: JSON

Sample input data:
```
{
  "type":"object",


   "company":{
      "name":"isaac test",
```

```
        "phone":"256702811716",

        "address":"16594 kla",

        "postalAddress":"",

        "email":""


    }
}
```

RESPONSE:

```
{

    "type":"addCompany",

    "result":"true",

    "message":"Company added successfullly",

    "errorMessage":"",

    "timestamp":""

}
```

Sample input:

sample_data_Market
DB.xlsx