1. **Install Eclipse**

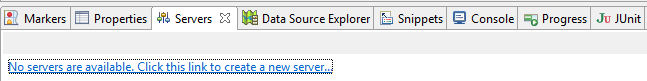
Download Luna Version of Eclipse from:

<https://www.eclipse.org/downloads/packages/eclipse-ide-java-ee-developers/lunasr2>

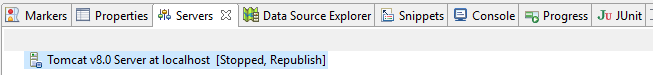
1. **Tomcat Server setup**
2. Download Tomcat Server 8 from:

<http://download.nextag.com/apache/tomcat/tomcat-8/v8.0.38/bin/apache-tomcat-8.0.38-windows-x64.zip>

1. Unzip the source
2. Setup the server in Eclipse:
3. First, there will be No servers as shown in Servers tab:

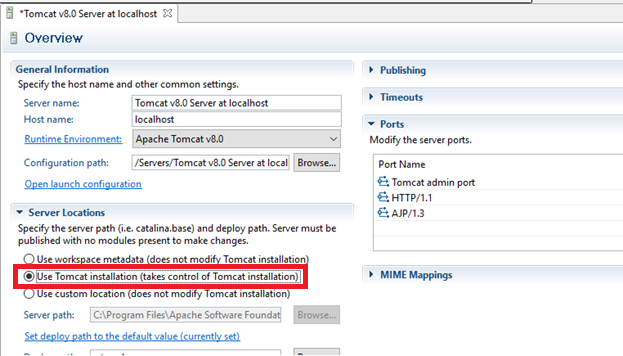


1. Click that link and select **Apache >> Tomcat v8.0 Server** and choose the downloaded folder path for Tomcat server.
2. Then we will see a new instance of Tomcat Server as shown below:

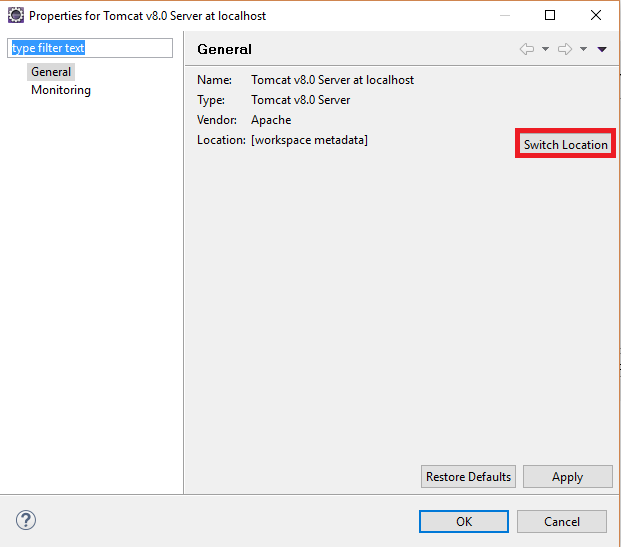


1. Double click that link and change the **Server Locations** option to:

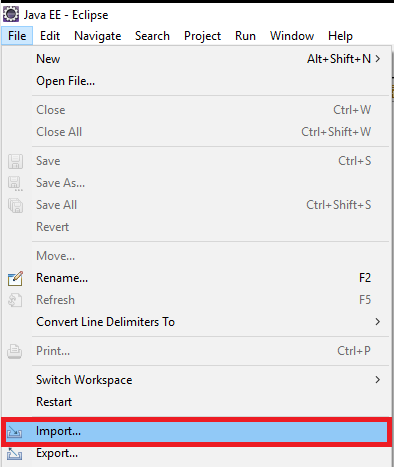
Use Tomcat installation as shown below:

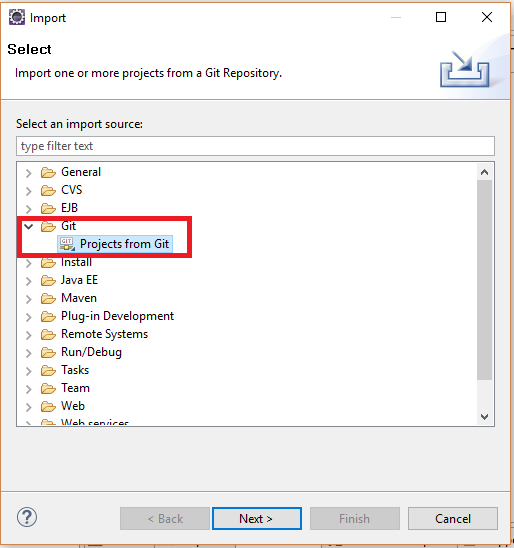


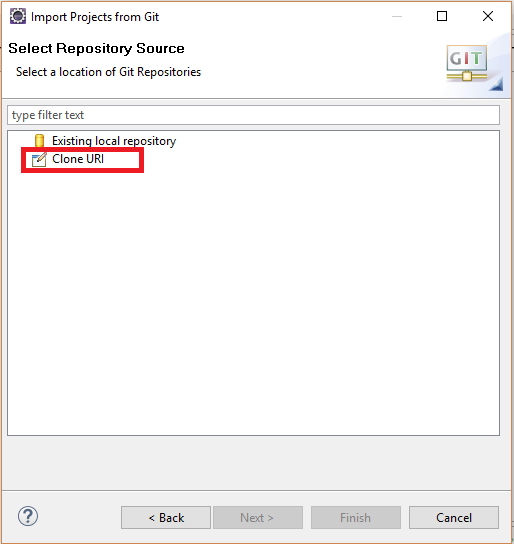
1. Also, we need to Right click the Server link as shown in step c and select the Switch Location button as shown below:

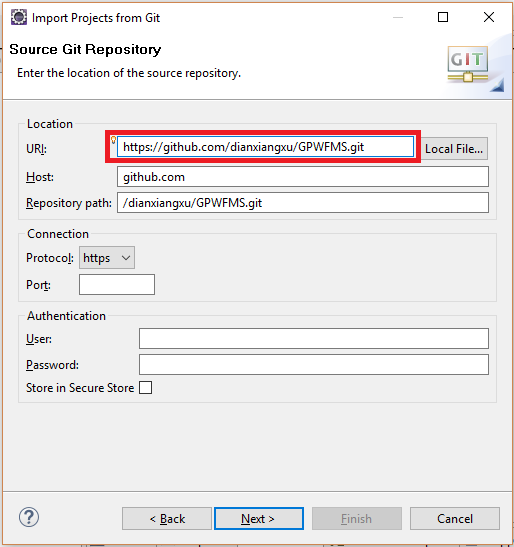


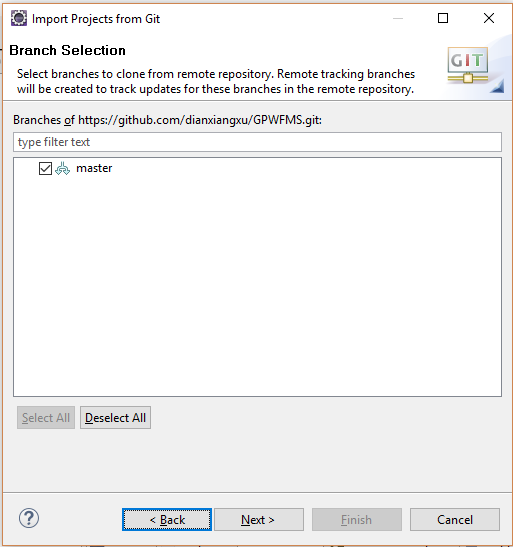
1. **Import GPMS folder from Github repository:**

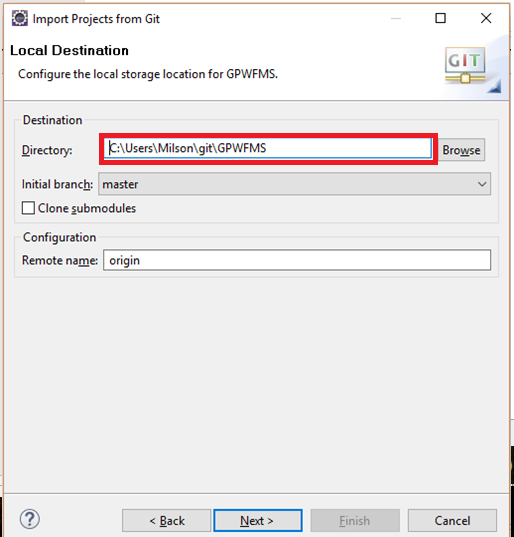


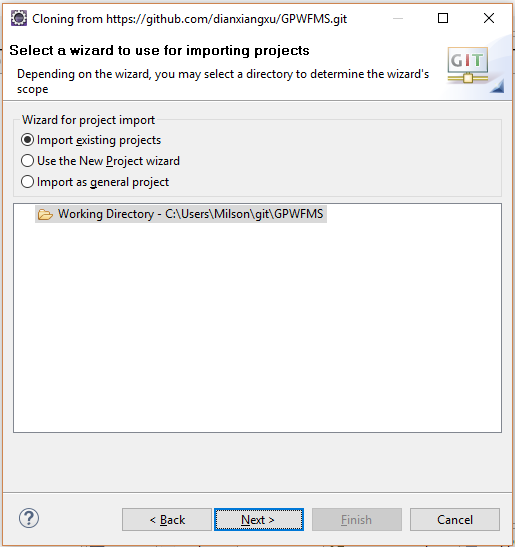




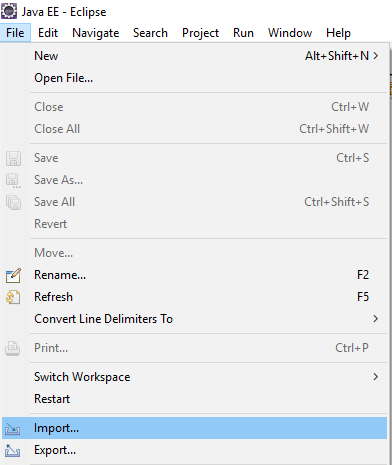
1. Make sure the URI is correct: [***https://github.com/dianxiangxu/GPWFMS.git***](https://github.com/dianxiangxu/GPWFMS.git#)

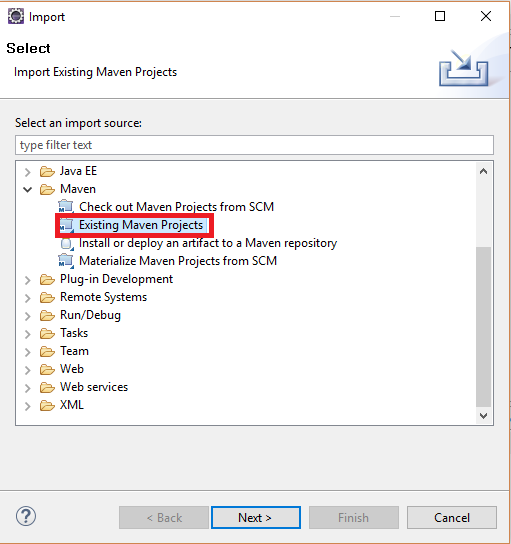




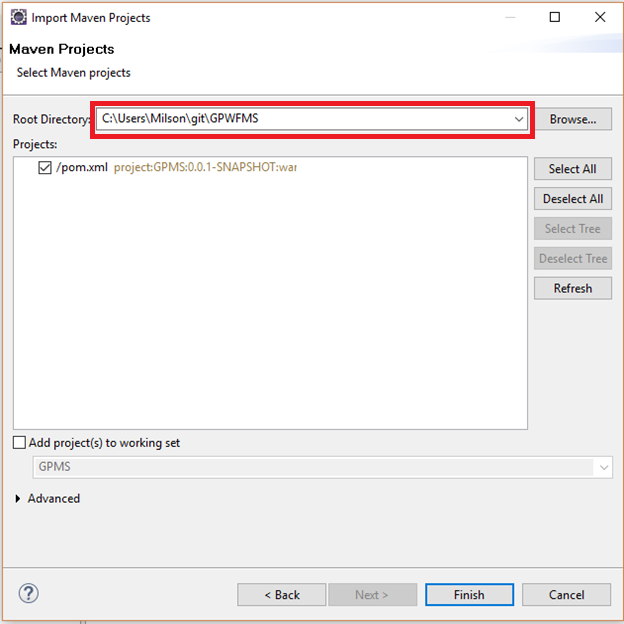


1. After the git repo is successfully created on the specified folder, we need to import this project as an existing Maven Project as follows:

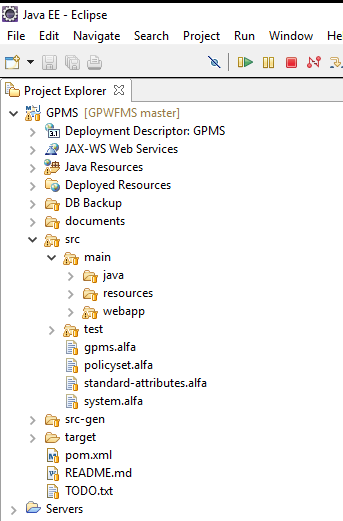




1. Browse and choose the recently created git repo path:

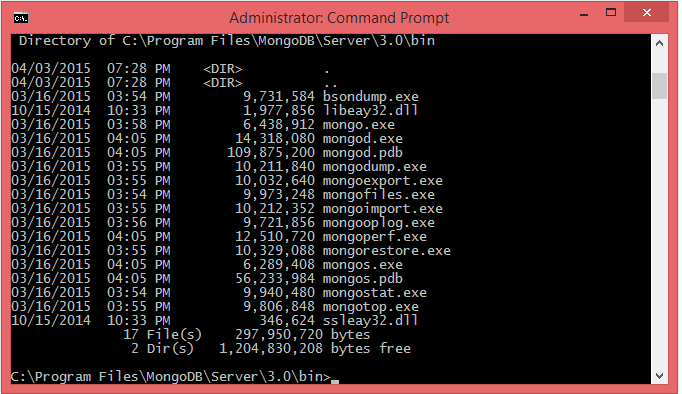


1. Click Finish and the folder structure looks like this:

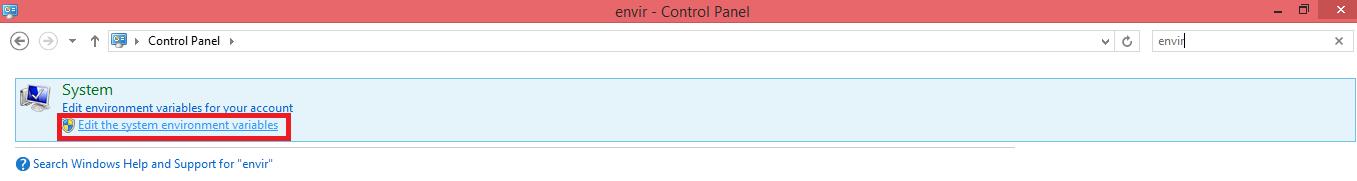


1. **MongoDB Database Setup**
2. Download the Current Stable Release of MongoDB i.e. .msi installer from: <https://www.mongodb.org/downloads> for windows OS.
3. Install the **msi** intaller and installation folder will be like this:

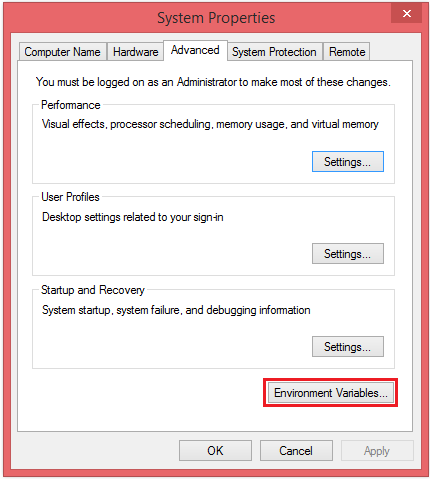
***C:\Program Files\MongoDB\Server\3.0\bin***

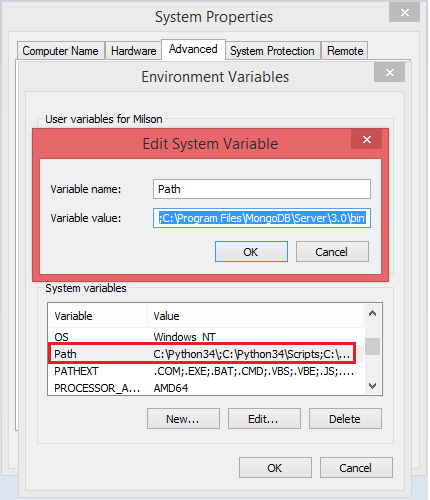


1. Set up the MongoDB Environment:
2. Go to the ***Control Panel*** and “***Edit the System environment variables”***:

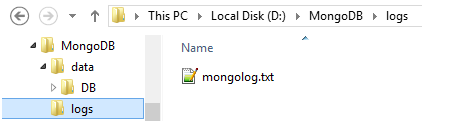


1. Edit **PATH** variable and append “***C:\Program Files\MongoDB\Server\3.0\bin***” as shown below:





1. MongoDB requires a data directory to store all data. We can customize this and define our own folder for convenience. For our purpose, we need to create "**D:\MongoDB**". And create “**D:\MongoDB\data\DB”** and **“D:\MongoDB\logs”** folders and create an Empty **mongolog.txt** file in **“D:\MongoDB\logs”** folder as shown below:



1. Run "**Command Prompt as Administrator**" and go to your MongoDB installation directory path upto **bin** folder using following command:

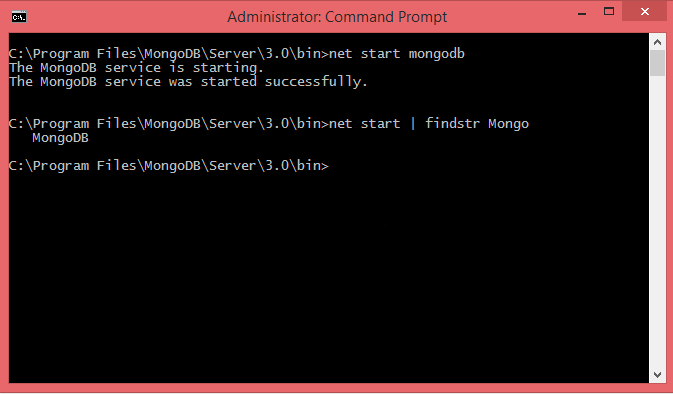
* **cd C:\Program Files\MongoDB\Server\3.0\bin**

1. To install MongoDB as background Windows Service, run this command in terminal:

***mongod --dbpath "D:\MongoDB\data\DB" --logpath "D:\MongoDB\logs\mongolog.txt" --install --serviceName "MongoDB"***

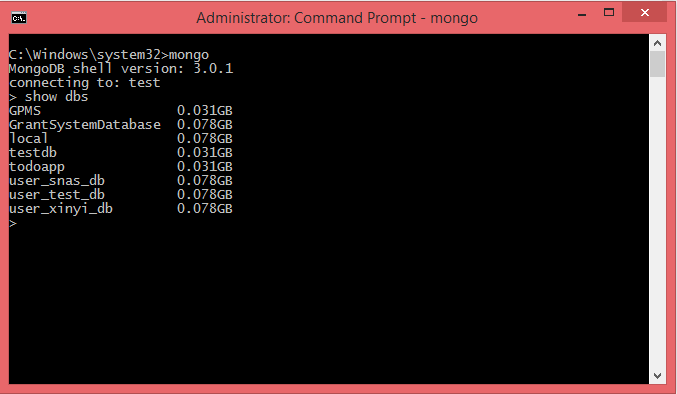
1. To start the registered “**MongoDB**” service execute following command in terminal from the MongoDB installation directory i.e. " **C:\Program Files\MongoDB\Server\3.0\bin** ":  
           -  ***net start mongodb***
2. To check and verify that the MongoDB service is running use the following command:

 -  ***net start | findstr Mongo***



1. To connect with mongo.exe shell, we can just start just typing:

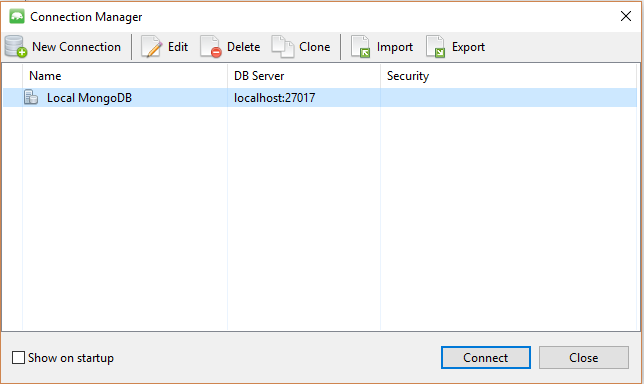
* ***mongo***



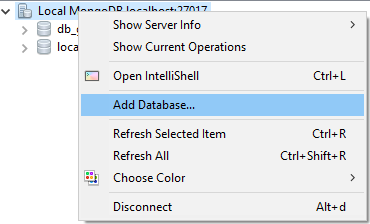
1. Install the Client GUI for MongoDB called **3T MongoChef** from:

<http://3t.io/mongochef/>

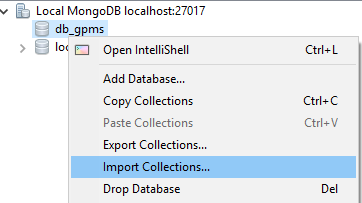
Connect to the Local Connection as a New Conncetion:



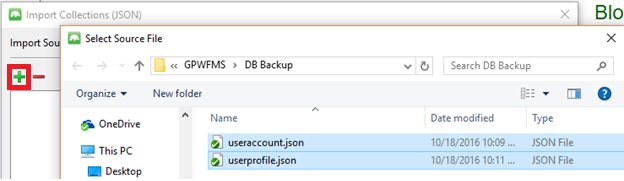
1. Add new database:



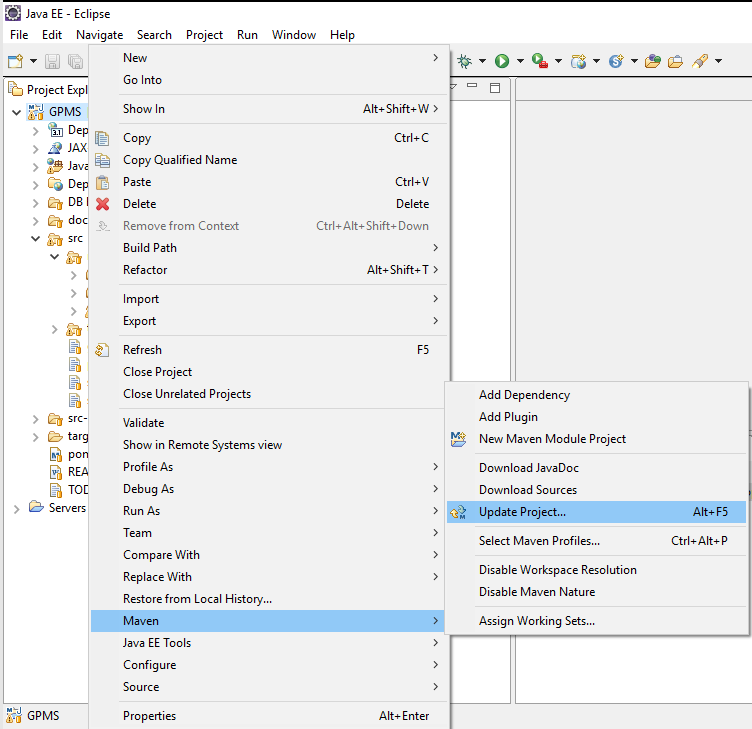
1. Name the new database as “**db\_gpms**” and import the default users using Import option:



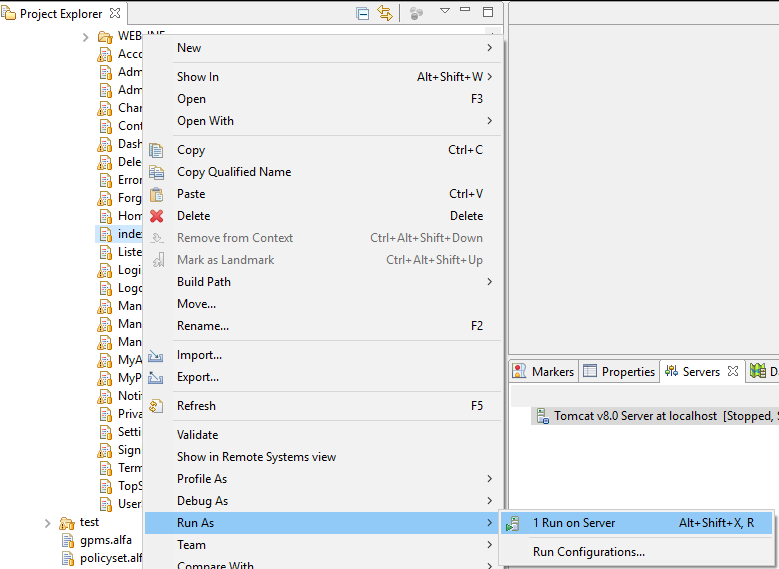
1. Import the default databases json format provided at : **<GPMS Source folder>\DB Backup**



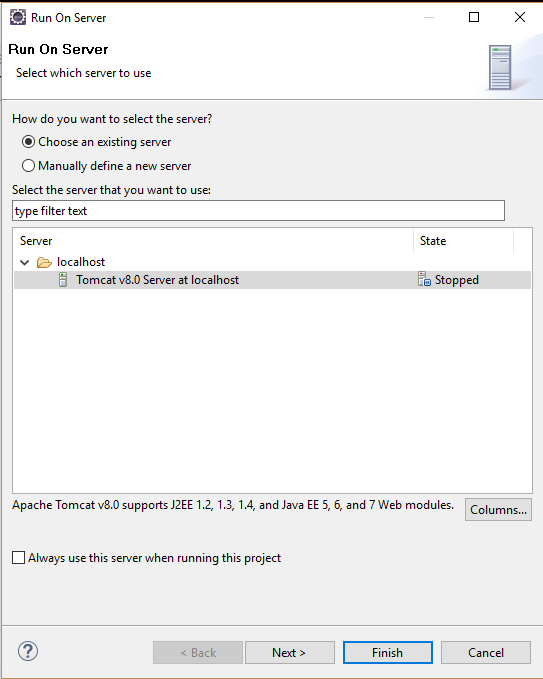
1. **Running GPMS Web Application using Eclipse:**
2. Clean Up the project first:



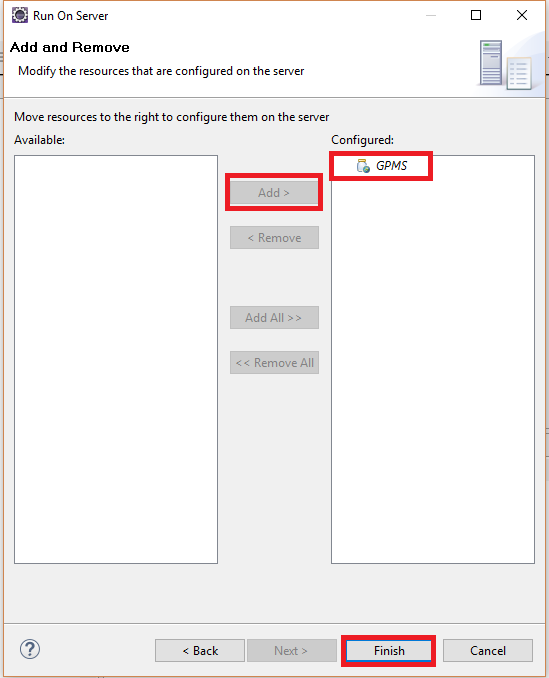
1. Select the **index.jsp** page and right click to open and run it on Server:



1. Choose the previously setup Tomcat Server as shown below:



1. Choose the **GPMS** project and add it to Configured side:

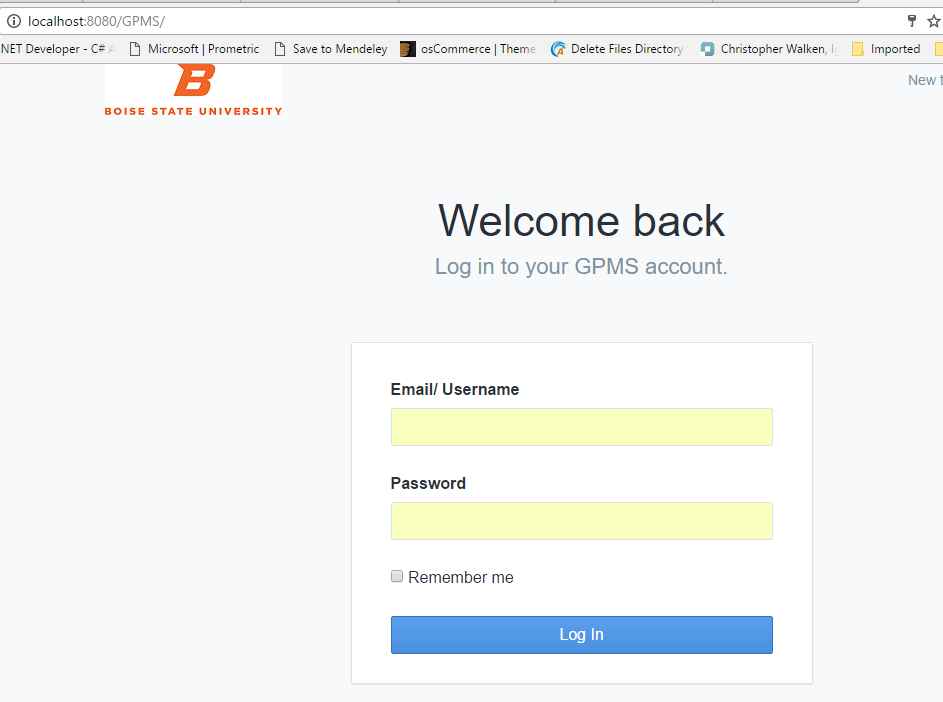


Now after successful run we can see the browser can load the test **index.jsp** page:

<http://localhost:8080/GPMS/index.jsp>

Now, the default GPMS **home** page can be opened browsing this url in web browser of your choice:

<http://localhost:8080/GPMS/>



As we already had imported the default **GPMS users** in our **MongoDB database** i.e. db\_gpms we can do login into the system. For simplicity, we have make all users’ password as: gpmspassword and username is first part of their corresponding email addresses.

For example, [irbcomputerscience@gmail.com](mailto:irbcomputerscience@gmail.com) can be logged into the system as entering whole email address or username: **irbcomputerscience** and password: **gpmspassword**

Some of the default existing User **Logins** are listed below:

**Admin Users:**

Username: admin

Email: [noreplygpms@gmail.com](mailto:noreplygpms@gmail.com)

Password: gpmspassword

**Position Type: University administrator**

**Position Title: IRB, University Research Administrator, University Research Director**

**IRBs:**

[irbcomputerscience@gmail.com](mailto:irbcomputerscience@gmail.com), [irbelectricalengineering@gmail.com](mailto:irbelectricalengineering@gmail.com)

**University Research Administrator:**

[racomputerscience@gmail.com](mailto:racomputerscience@gmail.com)

**University Research Director:**

[directorcomputerscience@gmail.com](mailto:directorcomputerscience@gmail.com)

1. **College: Engineering**

**Department:** Computer Engineering, Computer Science, Electrical Engineering

**Position Type:** Professional staff

**Position Title: Business Manager,** Department Administrative Assistant

**Business Managers:**

[bmcomputerengineering1@gmail.com](mailto:bmcomputerengineering1@gmail.com), [bmcomputerscience@gmail.com](mailto:bmcomputerscience@gmail.com), [bmelectricalengineering@gmail.com](mailto:bmelectricalengineering@gmail.com)

**Position Type:** Administrator

**Position Title:** **Department Chair**, Associate Chair, **Dean**, Associate Dean

**Department Chairs:**

[chaircomputerengineering@gmail.com](mailto:chaircomputerengineering@gmail.com), chaircomputerscience@gmail.com, [chairelectricalengineering@gmail.com](mailto:chairelectricalengineering@gmail.com)

For Delegation Test we have Associate Chair from **Computer Science** Department:

|  |  |
| --- | --- |
| Username | Password |
| edmund | gpmspassword |

**Deans:**

[deancomputerengineering@gmail.com](mailto:deancomputerengineering@gmail.com), [deancomputerscience@gmail.com](mailto:deancomputerscience@gmail.com), deanelectricalengineering@gmail.com

1. **College:** **Science**

**Department:** Physics, Chemistry

**Chairs:**

[chairphysics1@gmail.com](mailto:chairphysics1@gmail.com), chairchemistry@gmail.com

**Business Managers:**

[bmphysics1@gmail.com](mailto:bmphysics1@gmail.com), bmchemistry1@gmail.com

**Deans:**

[deanphysics1@gmail.com](mailto:deanphysics1@gmail.com), deanchemistry1@gmail.com

**Some General Users:**

**Position Type:** Non-tenure-track research faculty

**Position Title:** Research Professor, Associate Research Professor, Assistant Research Professor, Clinical Professor, Clinical Associate Professor, Clinical Assistant Professor, Visiting Professor, Visiting Associate Professor, Visiting Assistant Professor

**Position Type:** Research staff

**Position Title:** Research Associate, Research Scientist, Senior Research Scientist

**Position Type:** Teaching faculty

**Position Title:** Lecturer, Senior Lecturer, Adjunct Professor

**Position Type:** Tenured/tenure-track faculty

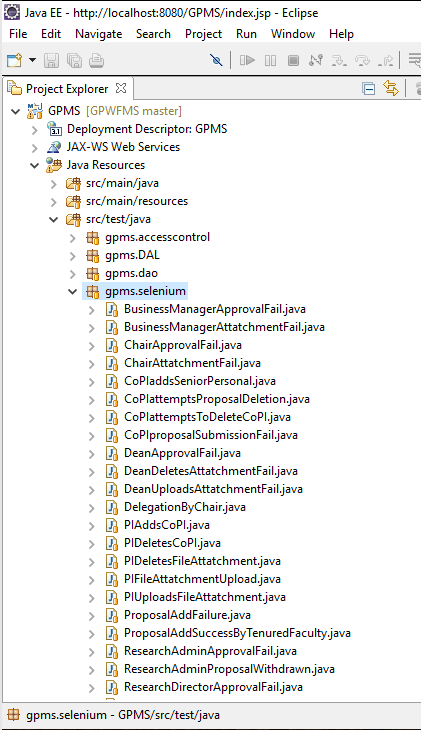
**Position Title:** Distinguished Professor, Professor, Associate Professor, Assistant Professor

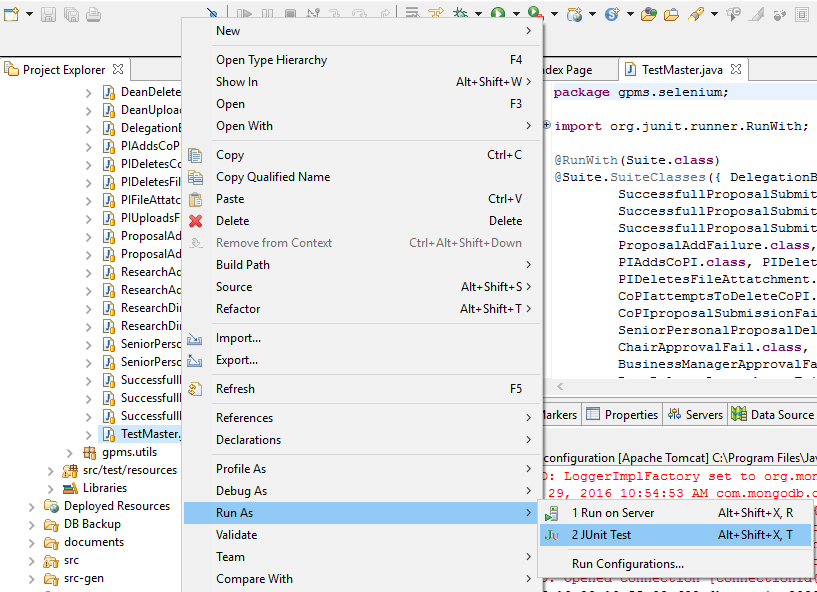
We have listed default users that possess different position titles, departments and colleges as defined above:

|  |  |
| --- | --- |
| Username | Password |
| milson | gpmspassword |
| NickC | gpmspassword |
| liliana | gpmspassword |
| samer | gpmspassword |
| tamanna | gpmspassword |
| selena | gpmspassword |

1. **Selenium Test Cases:**

We can run all at once the all test cases as shown below located in **“src/test/java/gpms.selenium”** just running **TestMaster.java** file as **jUnit** Test.





1. **Conformance Policy Test Cases can be done using:**

We have a template to do Conformance Policy **request/response** testing. For that we need to update and run **AdvanceTestV3.java** jUnit Test Class located at **“src/test/java/gpms.accesscontrol”**. We can add any number of test policies, their corresponding requests and responses in “**src/test/resources/advance/3”** folder as shown below:

