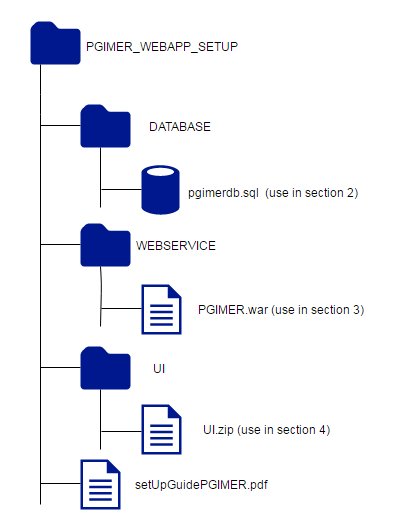
# Setup Guide for PGIMER-AIMS Web Application

## 0. Setup File Structure:

You will get a zip file name: pgimer\_webapp\_setup.zip and extract this file

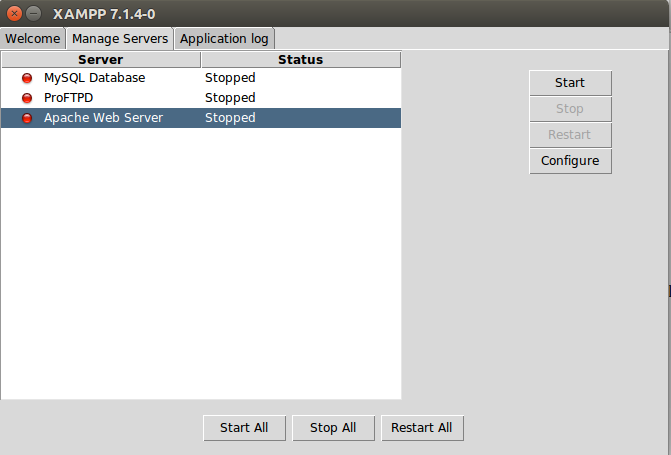
Folder structure would look like this:



## 1. Installation of XAMPP Server

1.1 download the xampp server to host the UI at http server and database at MySQL Server of xampp.  
Download it from <https://www.apachefriends.org/download.html>  
and then execute the following steps:  
Installing xampp-linux-x64-7.1.4-0-installer.run files in Ubuntu:

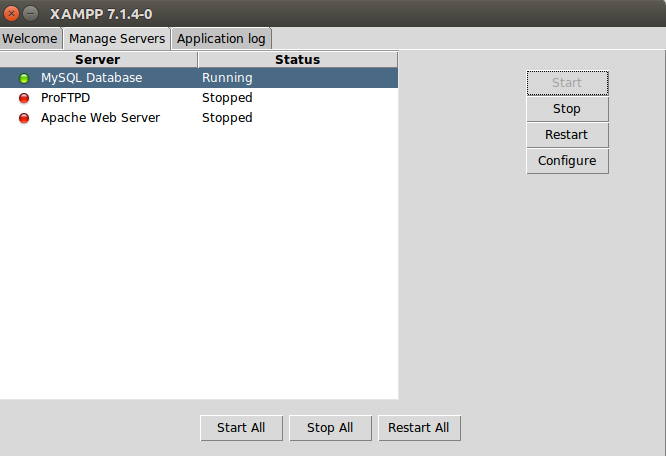
* Open a terminal(Applications>>Accessories>>Terminal).
* Navigate to the directory of the **xampp-linux-x64-7.1.4-0-installer.run** file.
* If you have your **xampp-linux-x64-7.1.4-0-installer.run** in your desktop, then type the following in terminal to get into Desktop and press Enter.
* Then type **chmod +x xampp-linux-x64-7.1.4-0-installer.run** and press Enter.
* Now type **sudo ./xampp-linux-x64-7.1.4-0-installer.run** and press Enter, and the installer will run.

After installation you would able to see the control panel of xampp

1.2 For Launching the XAMPP Control Panel use command **sudo /opt/lampp/manager-linux-x64.run**

## 2. Setup for PGIMER-AIMS Pac Database

2.1 We will use the MySQL Server of xampp (installed in the section 1.1)  
2.2 Now we will import the database from the pgimer sql file (file extention .sql)  
2.3 start the MySQL Server from xampp control panel (Launch xampp control panel using the command told in section 1.2 ). As shown in below image

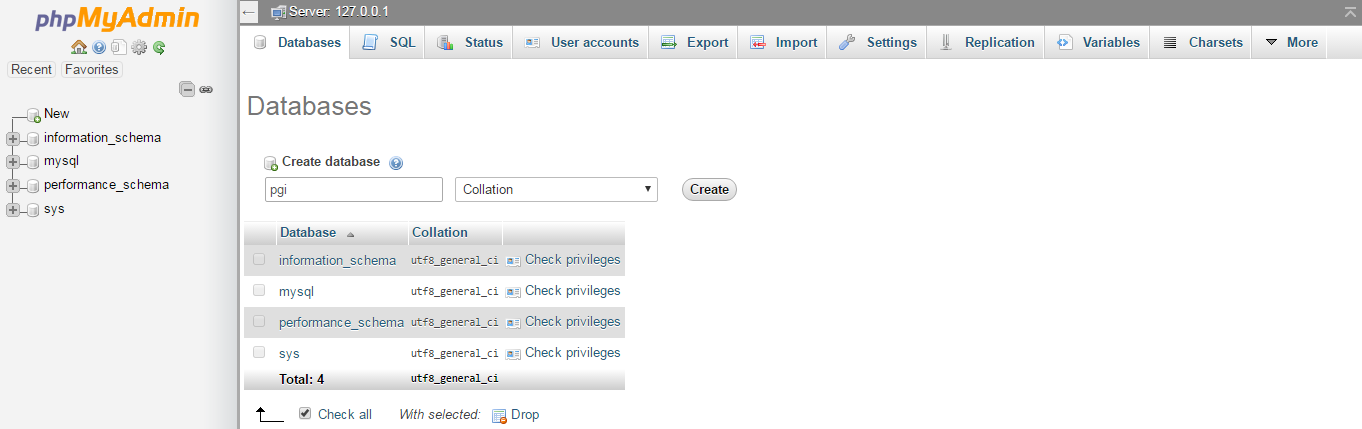
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**NOTE : Make sure that following attributes have same values as mentioned :**

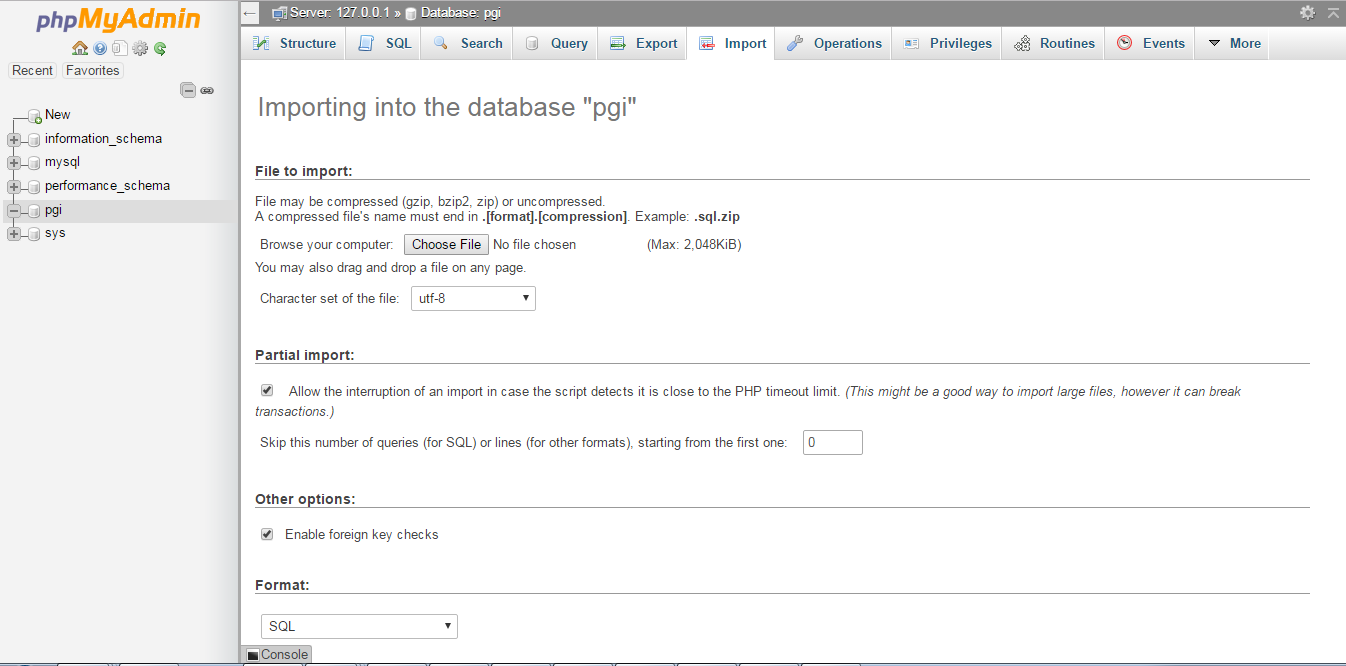
**username : root   
db password : pgipac  
port : 3306  
use same machine for db and webservices.**

**\*In order to change these attributes, we need to make the changes in hibernate.cfg.xml of PGIMER.war (webservice of PGIMER) and needed to compile it again.**

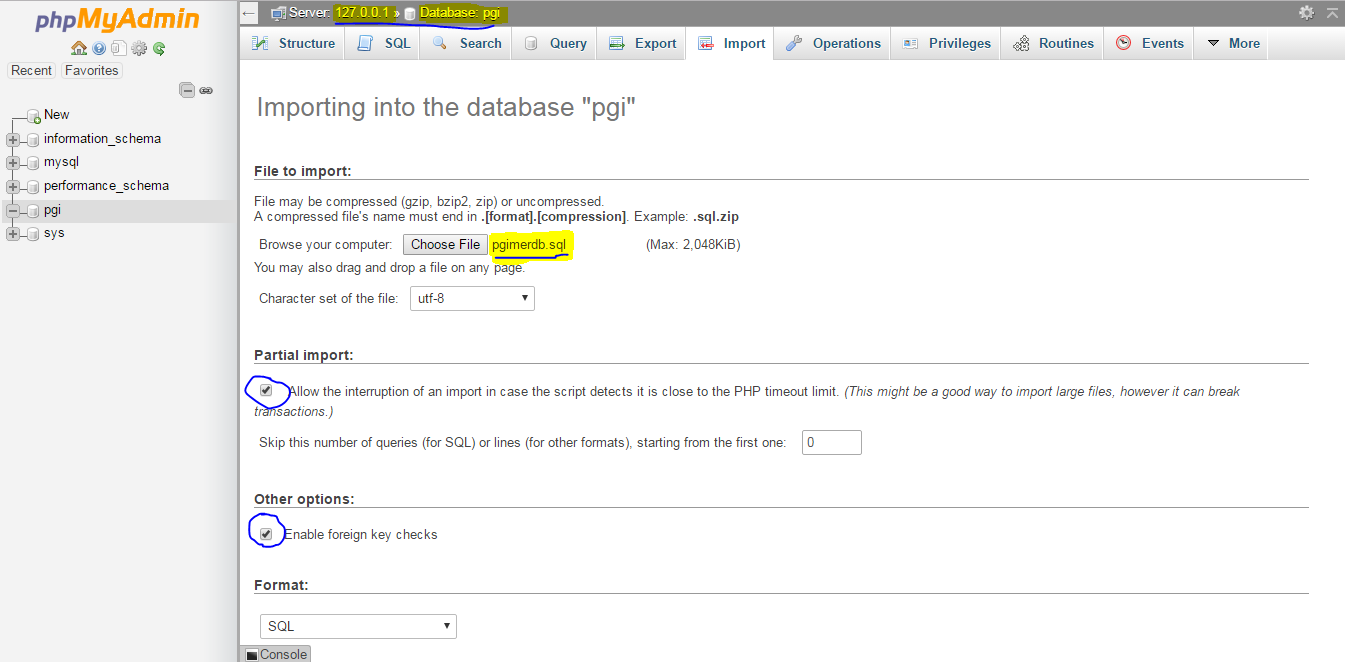
2.4 Create a schema with name “pgi” and the we will export the data in this schema.



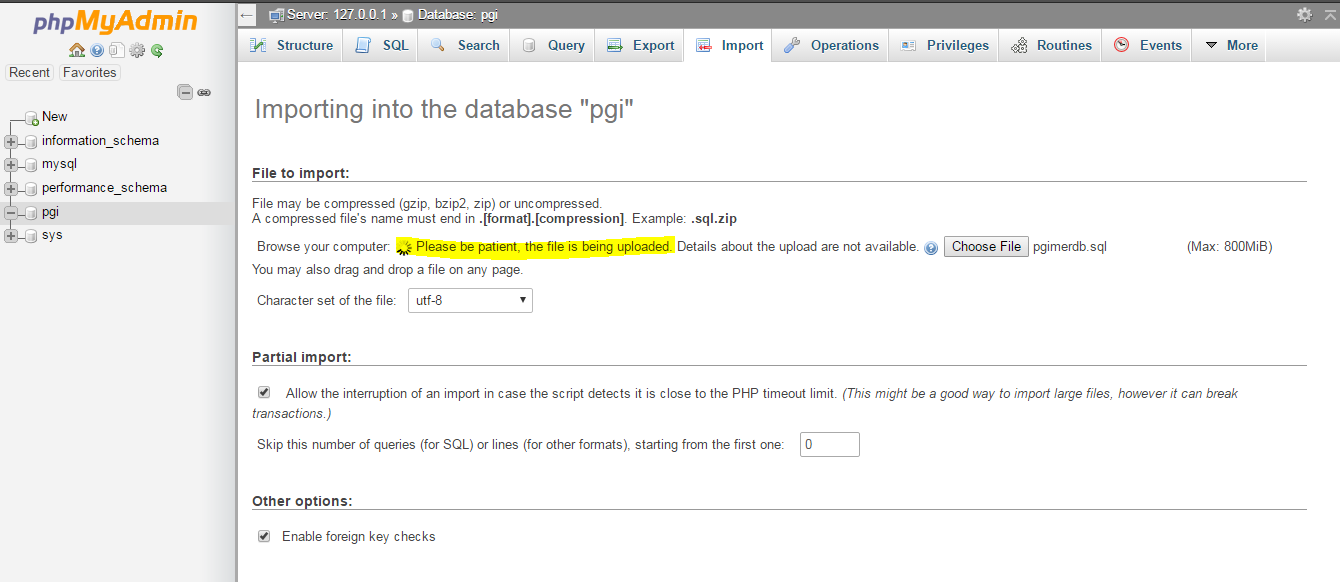
2.5 Now we will import the tables from .sql file provide (pgimerdb.sql)



Now choose file and import the query in the pgi schema



\*Note: It will take some time to execute the queries.



Then check the tables inside pgi schema.

## 3. Set up for PGIMER-AIMS Pac WebService

3.1 Install Java ( Version 8) on the server. Execute the following steps  
**Installing java**sud

$ sudo apt-get update  
$ sudo apt-get install oracle-java8-installer  
$ sudo apt install oracle-java8-set-default  
  
**Verify Installed Java Version use command “ $ java -version ”**

3.2 **Install the Tomcat 8.** Execute the following steps :  
Download the tar.gz for apache Tomact 8 from link : <https://tomcat.apache.org/download-80.cgi>  
then open terminal and execute

* copy downloaded the tar.gz of tomact 8 and paste it in /home/<USER>
* sudo groupadd tomcat
* sudo useradd -s /bin/false -g tomcat -d /opt/tomcat tomcat
* sudo tar -xzvf apache-tomcat-8.5.5.tar.gz
* sudo mv apache-tomcat-8.5.5 /opt/tomcat
* sudo chgrp -R tomcat /opt/tomcat
* sudo chown -R tomcat /opt/tomcat
* sudo chmod -R 755 /opt/tomcat
* sudo nano /etc/systemd/system/tomcat.service
* Add the following content:

[Unit]

Description=Apache Tomcat Web Server

After=network.target

[Service]

Type=forking

Environment=JAVA\_HOME=/usr/lib/<INSTALLED\_JRE\_PATH>

Environment=CATALINA\_PID=/opt/tomcat/temp/tomcat.pid

Environment=CATALINA\_HOME=/opt/tomcat

Environment=CATALINA\_BASE=/opt/tomcat

Environment='CATALINA\_OPTS=-Xms512M -Xmx1024M -server -XX:+UseParallelGC'

Environment='JAVA\_OPTS=-Djava.awt.headless=true -Djava.security.egd=file:/dev/./urandom'

ExecStart=/opt/tomcat/bin/startup.sh

ExecStop=/opt/tomcat/bin/shutdown.sh

User=tomcat

Group=tomcat

UMask=0007

RestartSec=15

Restart=always

[Install]

WantedBy=multi-user.target

* **To start server : sudo /opt/tomcat/bin/startup.sh**
* **To Stop Server : sudo /opt/tomcat/bin/shutdown.sh**

3.3 add the CORS Filter in tomcat web.xml (~Tomcat/conf/web.xml)

<filter>

<filter-name>CorsFilter</filter-name>

<filter-class>org.apache.catalina.filters.CorsFilter</filter-class>

<init-param>

<param-name>cors.allowed.origins</param-name>

<param-value>\*</param-value>

</init-param>

<init-param>

<param-name>cors.allowed.methods</param-name>

<param-value>GET,POST,HEAD,OPTIONS,PUT</param-value>

</init-param>

<init-param>

<param-name>cors.allowed.headers</param-name>

<param-value>Content-Type,X-Requested-With,accept,Origin,Access-Control-Request-Method,Access-Control-Request-Headers,Auth\_token</param-value>

</init-param>

<init-param>

<param-name>cors.exposed.headers</param-name>

<param-value>Access-Control-Allow-Origin,Access-Control-Allow-Credentials</param-value>

</init-param>

<init-param>

<param-name>cors.support.credentials</param-name>

<param-value>true</param-value>

</init-param>

<init-param>

<param-name>cors.preflight.maxage</param-name>

<param-value>1800</param-value>

</init-param>

</filter>

<filter-mapping>

<filter-name>CorsFilter</filter-name>

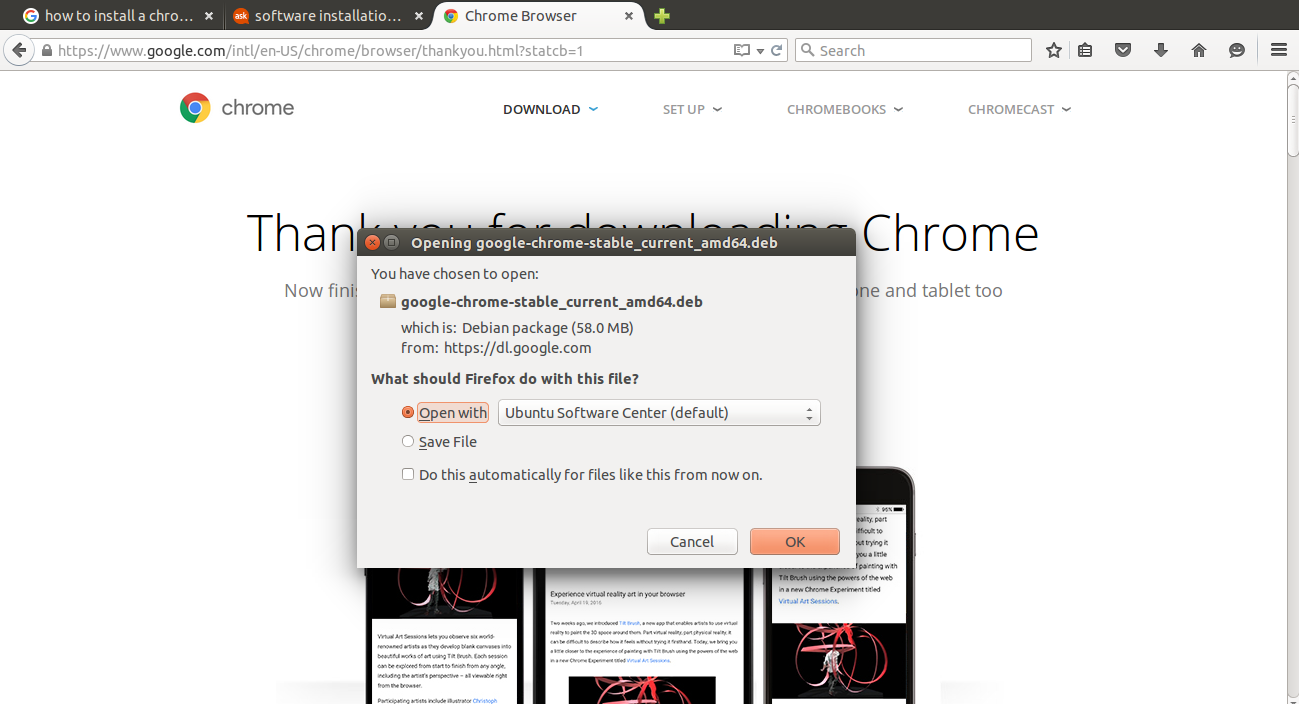
<url-pattern>/\*</url-pattern>

</filter-mapping>

3.4 **Deploy the Webservice :**  
Stop the Tomcat server, if running  
go to the directory /**opt/tomcat/webapps**  
take backup and remove the **PGIMER.war** and **PGIMER folder**, if exist  
copy the latest **PGIMER.war** to **webapps folder**start the tomcat server (see command in section 3.2)

## 4. Set up for PGIMER-AIMS Pac UI

4.1 Install Google Chrome for best compatibility of application.  
 Download it from link <https://www.google.com/intl/en-US/chrome/browser/desktop/index.html>  
save the google-chrome-stable-current-amd64.deb in the system

  
4.2 We will use the Apache HTTP Server of xampp (installed in the section 1)  
4.3 Create a new folder name “**UI**” and **extract the UI.zip to this folder**   
4.3 Now **copy the folders and files (like app,node\_modules,index.html, etc.)** from folder UI and paste it to the location : **/opt/lampp/htdocs**4.4 Now change the utility.component.js  
(path : **/opt/lampp/htdocs/app/Modules/Utility/ utility.component.js)  
change the ip address for webservice**

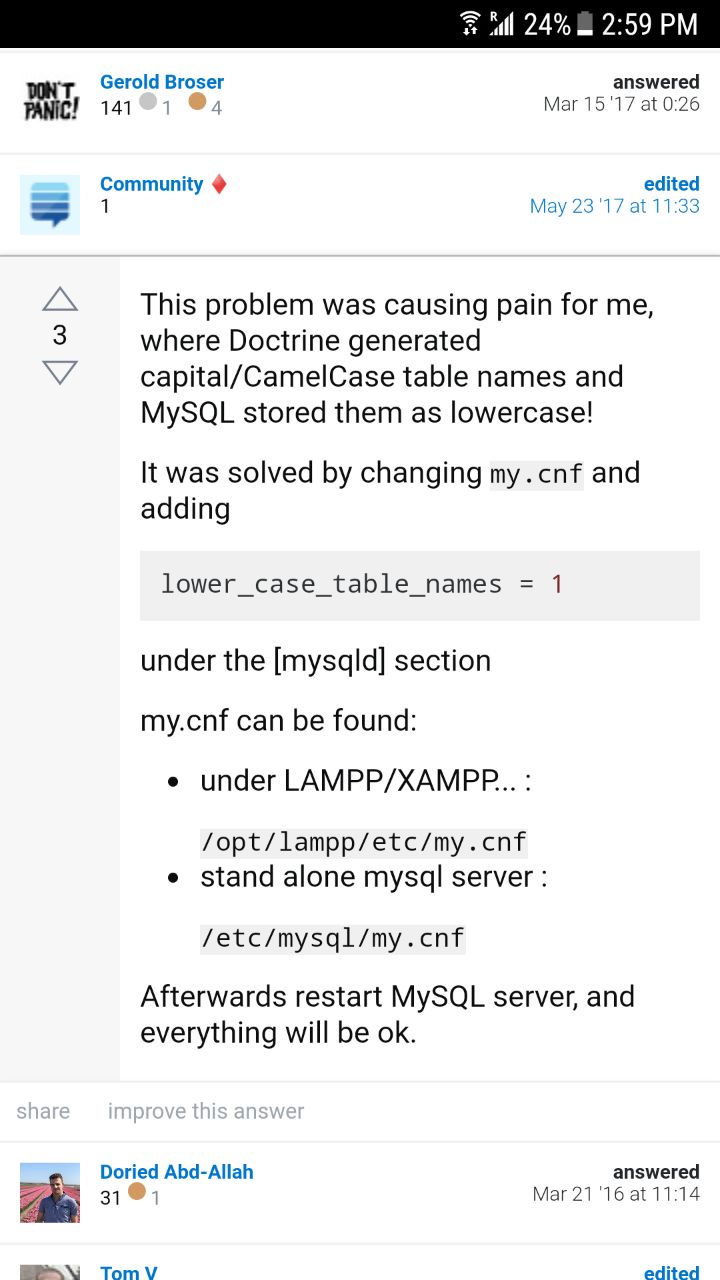
**( 'webapi' : '<IP\_ADDR\_WEBSERVICE:TOMCAT\_PORT>'/PGIMER )**

**\*\*Note : Default credentials for PGIMER-AIIMS are :  
username: admin**

**Password: pgi@123**

**To ensure the mysql is accessible from all hosts then create a new user for mysql , where root user is login from all hosts instead of only local host.**

**To ensure the Ubuntu considers the tables names with lower case**

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**Replace the existing context.xml and web.xml with the below attached ones . You have to replace it in \opt\tomcat\conf folder.**

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**Incase of any change in the database password, context.xml has to be updated.**

**Don’t change the Name in the context.xml, keep it FooDB only as it is referred by the hibernate.cfg.xml inside the PGIMER.war.**

**For IntraOp, Applicaton.**

1. **The machine on which you want to deploy the intraop application, must have JRE 8u171 installed on it.**
2. **Update the database URL in the hibernate.cfg.xml**
3. **Make the settings to 5 mins in config.ini**
4. **Make the shortcut with java –jar**

**Read out the following URL to change the GC Settings ..**

[**https://www.javacodegeeks.com/2017/11/minimize-java-memory-usage-right-garbage-collector.html**](https://www.javacodegeeks.com/2017/11/minimize-java-memory-usage-right-garbage-collector.html)