ForestGEO Data Entry and Reporting System - Installation Guide

The ForestGEO Data Entry and Reporting System is a web-based tool to help you enter and report on ForestGEO data.

Prerequisites:

- Apache Server: Needed to run a PHP based tool on a browser in your own localhost
- MySQL Server: MySQL DB is required to store data

If you already have these installed on your computer, you can proceed to step B to set up the data entry and reporting tool.
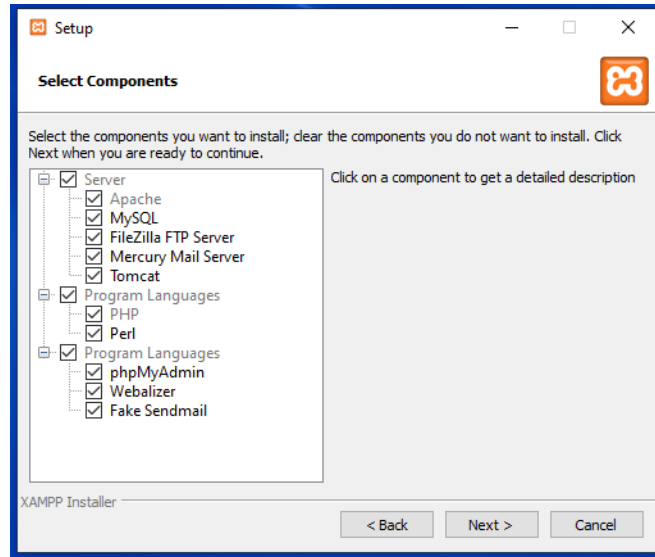

A. Install XAMPP on your system:

XAMPP is a free, easy to install Apache distribution containing MariaDB (MySQL Fork), PHP, and Perl.
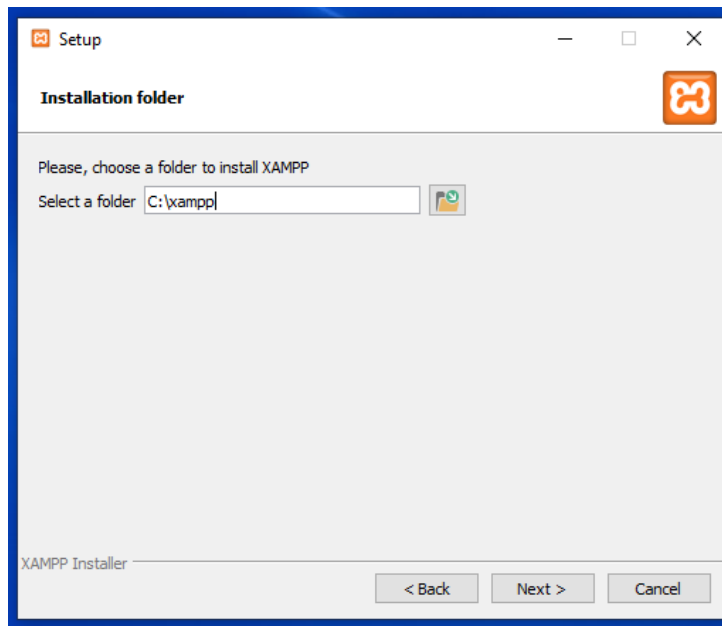
Download latest XAMPP from: https://www.apachefriends.org/index.html

1. After download, execute the setup file:
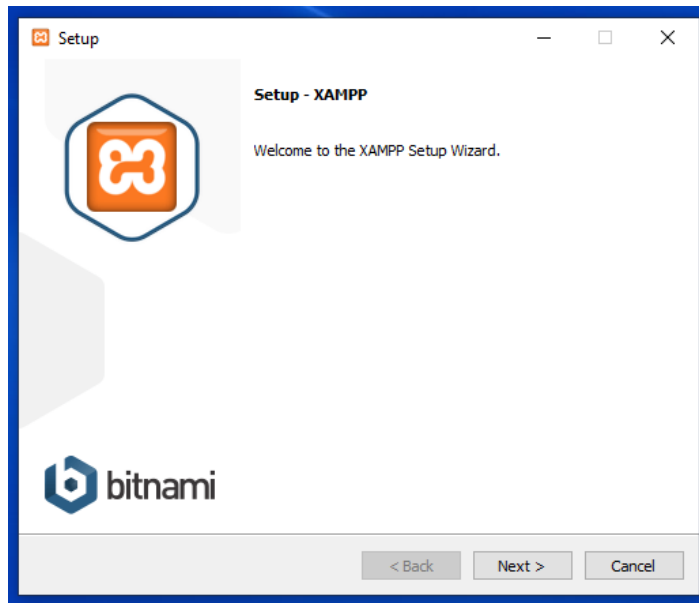
2. Select Components to install:
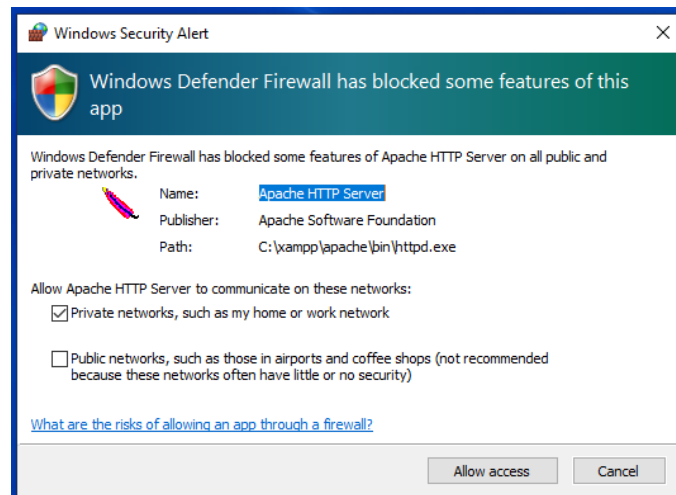   a. Apache, MySQL, PHP and phpMyAdmin are required. Others are optional.

3. Select location for installation. If you don't have a preference, keep it as default.
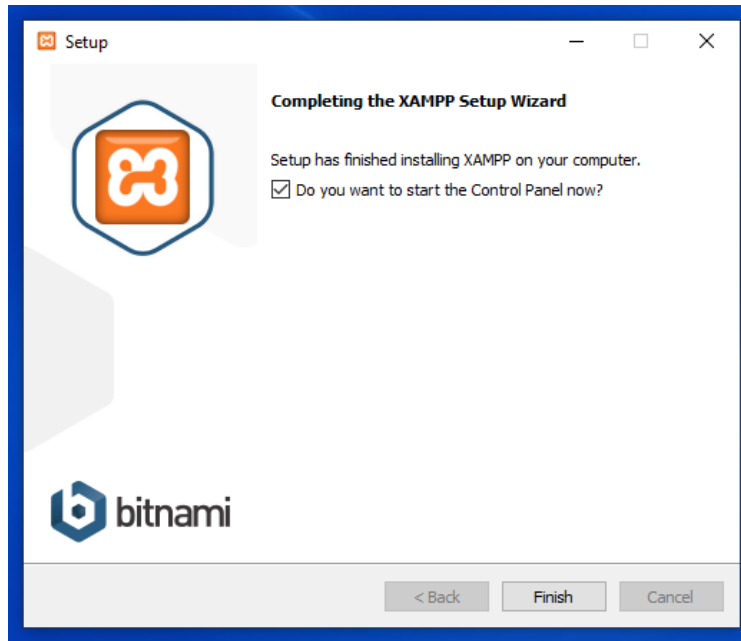
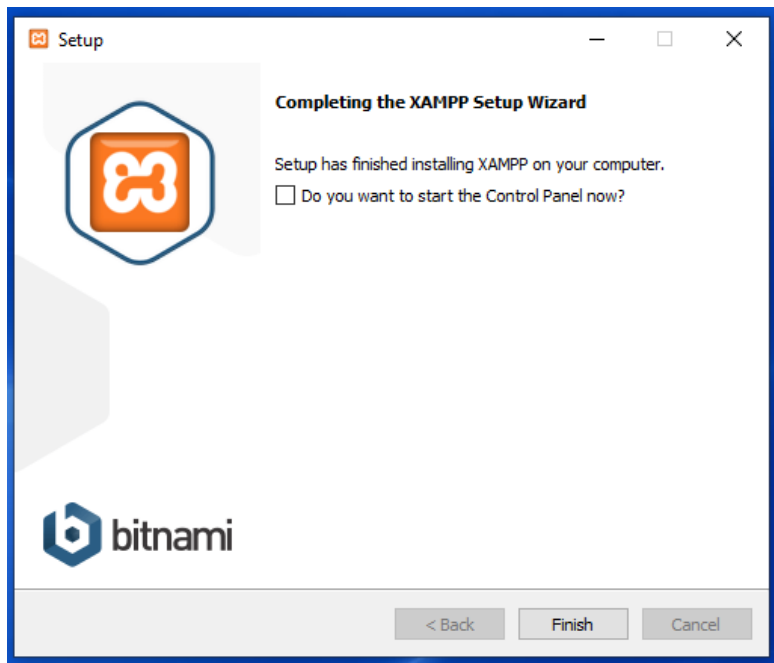4. Keep moving through the next steps and you'll reach the installation.

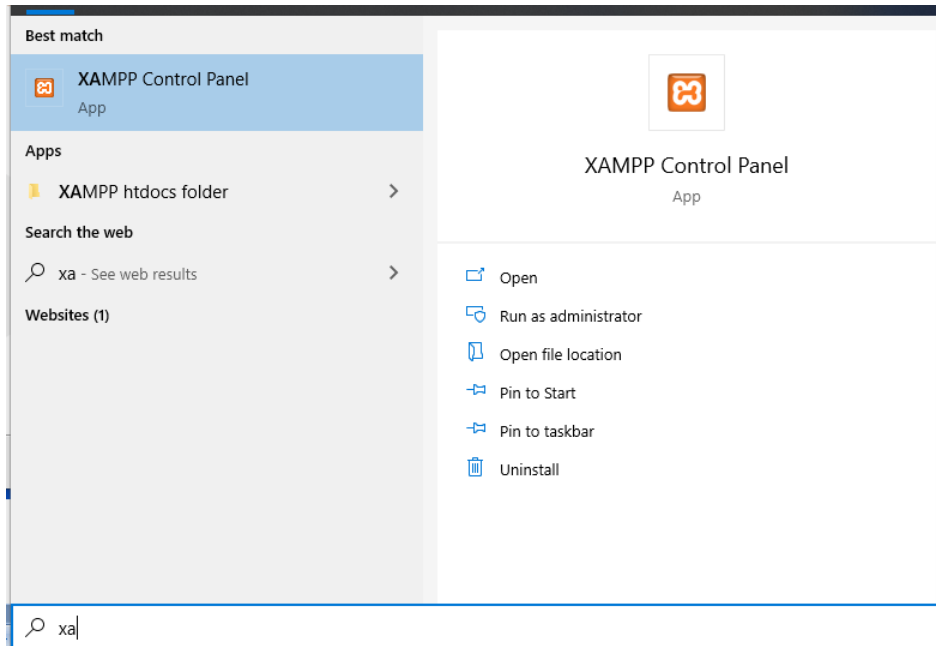5. After installation, Windows users will receive security alert. Click **'Allow access'**
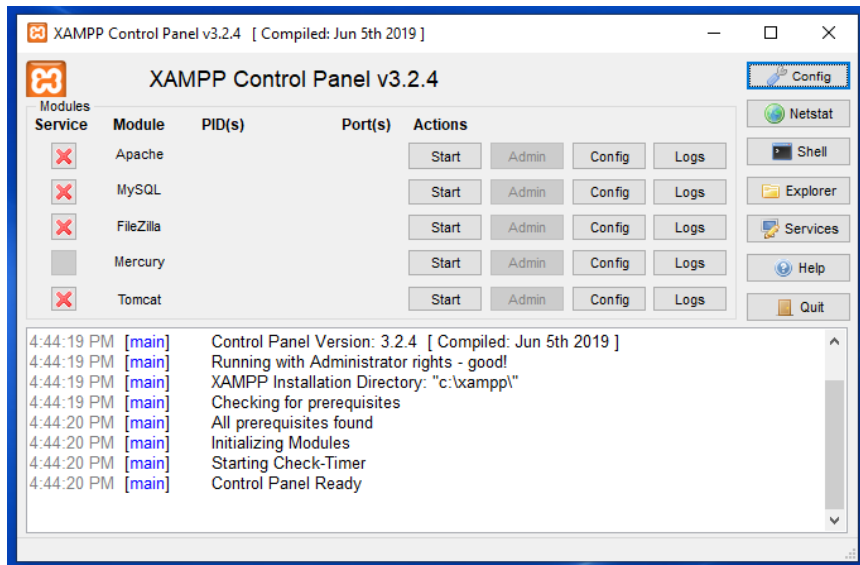
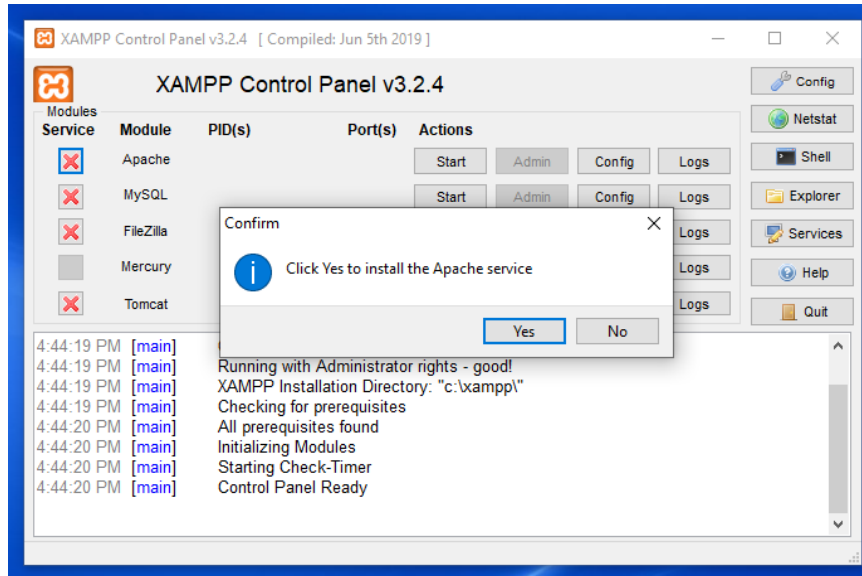6. **Uncheck** 'Do you want to start the Control Panel now?' and hit 'Finish'

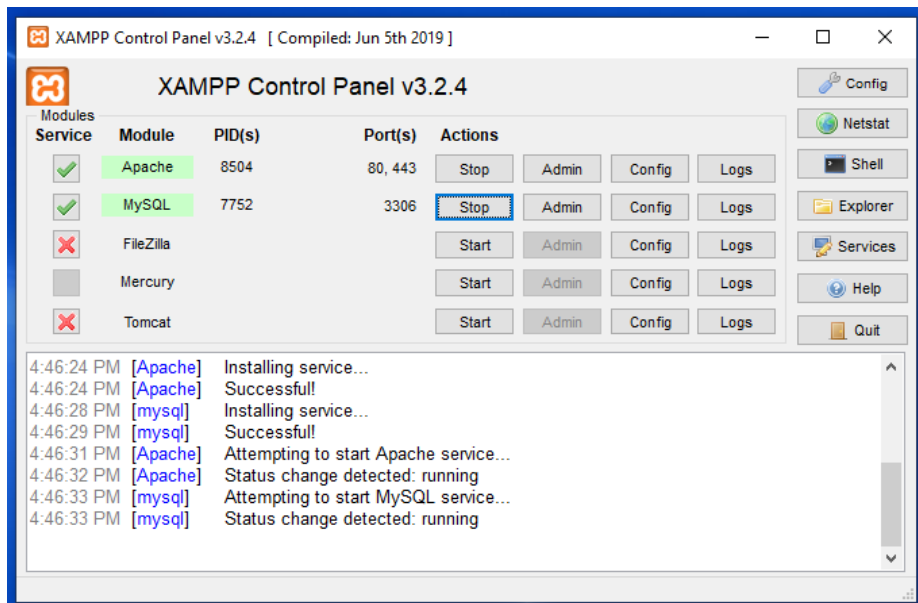7. Now search for XAMPP and click right click to select 'Run as administrator'

8. Click on the check boxes under Service for Apache and MySQL. This will install services for both servers, which will allow both servers to start automatically at reboot.

9. After installing services, click 'Start' action buttons to start Apache and MySQL.

10. Open browser and type 'localhost'. If XAMPP was installed properly you will see the following page.
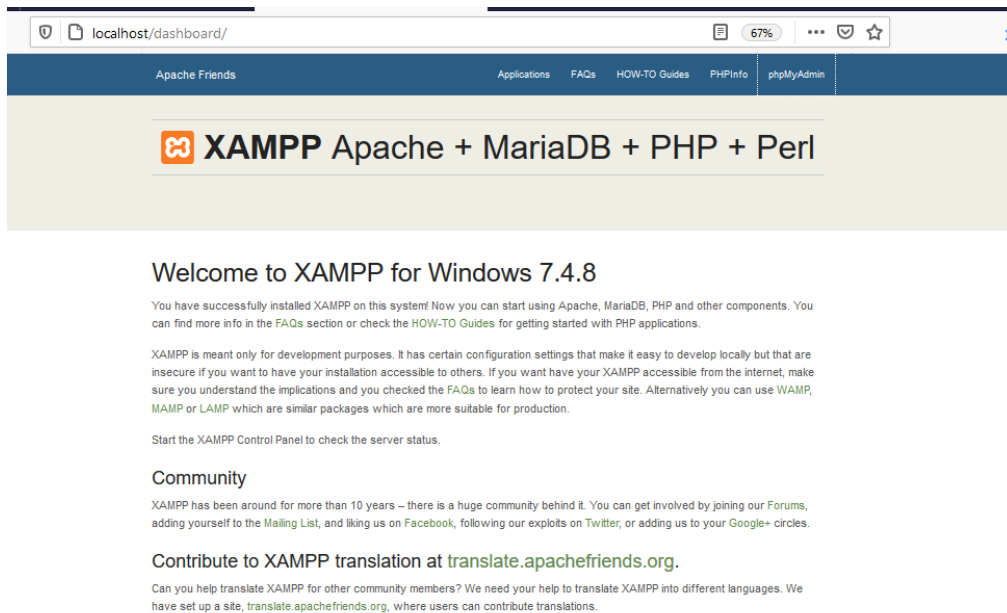
B. Setup Data Entry and Reporting Tool:

1. Create 'db_webuser' database

    i. User phpMyAdmin to create new database db_webuser
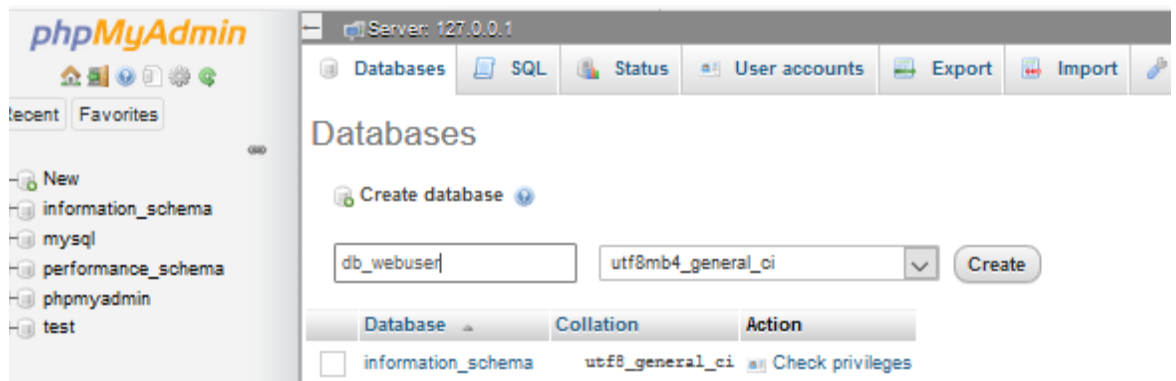
    ii. Use the 'ctfsweb_webuser.sql' file included in download package to create the required metadata tables. If you have a different user than the default user 'root' , please update the 'DEFINER' information to correct user.

NOTE: For detailed instructions on steps 2 and 3 (below), please see the *ForestGEO Database Handbook*.

2. **Create the Site Database**

3. **Copy the 'ctfsweb' folder in the package to ..\xampp\htdocs**
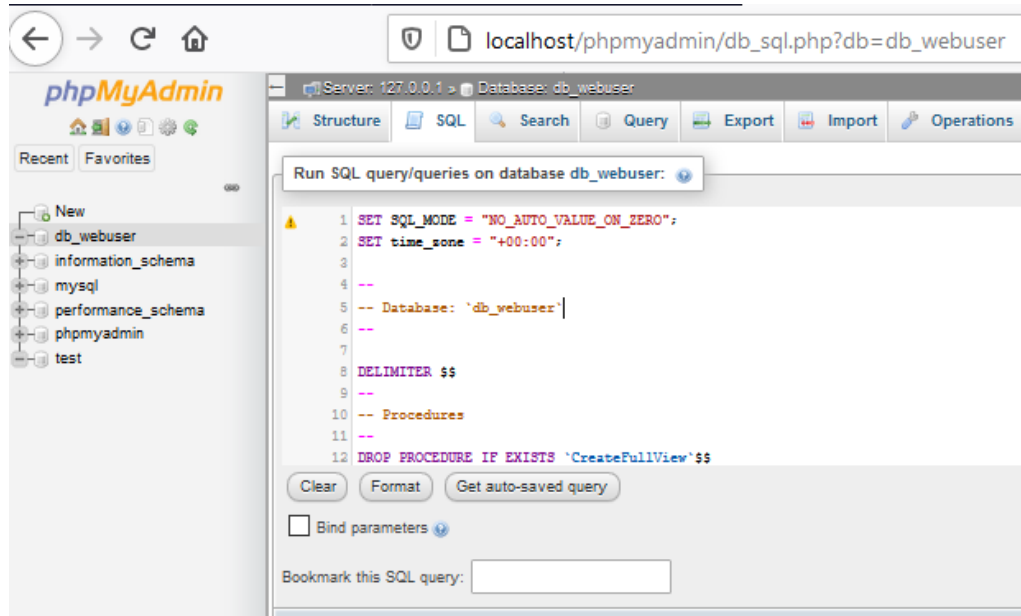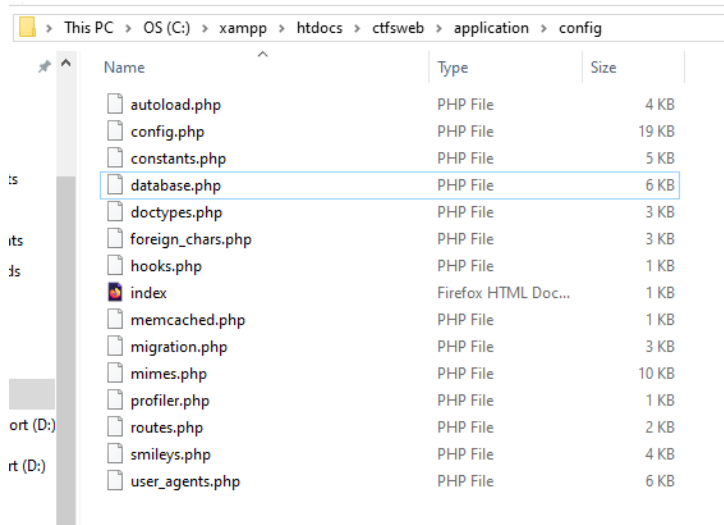
4. **Update database configuration file**
   i. Open file ..\ctfsweb\application\config\database.php

   ii. Do NOT EDIT the first set (db1) except for the username and password, if different.

iii. Use following set of code for each site database you need to link with the system

```
$db['db_bci'] = array(
    'dsn'      => '',
    'hostname' => 'localhost',
    'username' => 'root',
    'password' => '',
    'database' => 'bci',
    'dbdriver' => 'mysqli',
    'dbprefix' => '',
    'pconnect' => FALSE,
    'db_debug' => (ENVIRONMENT !== 'production'),
    'cache_on' => FALSE,
    'cachedir' => '',
    'char_set' => 'utf8',
    'dbcollat' => 'utf8_general_ci',
    'swap_pre' => '',
    'encrypt' => FALSE,
    'compress' => FALSE,
    'stricton' => FALSE,
    'failover' => array(),
    'save_queries' => TRUE
);
```

iv. Replace 'db_bci' with the name of your choice. This name will be required in the next step to add the database name into the list of databases.

v. Enter username, password and database name in the required fields.

vi. Copy the set of lines in 'iii.' for each site database connection.

5. **Use Admin Panel to add databases and users**
   i. Open link - http://localhost/ctfsweb/index.php/admin
   ii. Use password - 'ctfsadmin*123' to login into panel.
   iii. Add Plot
   - Plot Name: This is the site/database name that will be displayed in the dropdown menu on login panel.
   - Database Name: This is the name you used in the last step in place of 'db_bci'
   - Version of Database: The Data Entry System only works with the 'New' version, while reporting can work with both 'New ' and 'Old'.
   iv. Add User
   - Username: Username for the login system. Use different username for different users.
   - Password: Password for the login system.
   - Database Name: Select the database name from the list of databases you added using Add Plot form.

System is now ready for use.