**LWC Counseling Log System**

**System Build Instructions on Ubuntu Laptop, Raspberry Pi, and Ubuntu Server**

1. [LAMP](http://howtoubuntu.org/how-to-install-lamp-on-ubuntu) – Ubuntu Server
   1. Apache
      1. Enter the command below into the terminal
      2. sudo apt-get install apache2
   2. MySql
      1. Enter the command below into the terminal
      2. sudo apt-get install mysql-server
   3. PHP
      1. Enter the command below into the terminal
      2. sudo apt-get install php5 libapache2-mod-php5
   4. Restart The Server
      1. Enter the command below into the terminal
      2. Sudo service apache2 restart
   5. Check Apache
      1. Navigate to <http://serverip>/ or <http://localhost/>
   6. Check PHP
      1. Enter the command below into the terminal
      2. php -r 'echo "\n\nYour PHP installation is working fine.\n\n\n";'
   7. Navigate to /var/www/html and copy the 2 files - get\_city.php and get\_zip.php – into the html directory
   8. Create a directory in var/www/html named LWC
   9. Add the provided Server PHP files – deleteSessions.php, insertClient.php and insertCounselor.php – into the LWC directory
   10. In any of the PHP files that connect to the database, you will have to change the Database variables. These are usually located at the top of the file and are easy to fine. Look for words like “localhost” and “testuser”
2. [phpMyAdmin](https://help.ubuntu.com/lts/serverguide/phpmyadmin.html) – Ubuntu Server
   1. Enter the command below into the terminal
   2. sudo apt install phpmyadmin
   3. Navigate to <http://serverip/phpmyadmin>
   4. Enter root for the username
   5. Change the root password in phpmyadmin and add other users
   6. Navigate to /etc/phpmyadmin/config.inc.php
   7. Change the following line from $cfg['Servers'][$i]['host'] = 'db\_server'; to $cfg['Servers'][$i]['host'] = ‘serverip'; (serverip is your server address)
   8. Create database in phpmyadmin called “LWC”
   9. Create tables in the LWC database: Counselor, Client, CounselingLog
   10. Counselor table Fields:
       1. CounselorID – VARCHAR(24) – Primary Key
       2. LastName – VARCHAR(24)
       3. FirstName – VARCHAR(24)
       4. Address – VARCHAR(24)
       5. City - VARCHAR(24)
       6. State - VARCHAR(2)
       7. Zip – INT(10)
       8. Phone - VARCHAR(24)
       9. Email - VARCHAR(24)
   11. Client table Fields:
       1. ClientID – VARCHAR(24) – Primary Key
       2. LastName – VARCHAR(24)
       3. FirstName – VARCHAR(24)
       4. Address – VARCHAR(24)
       5. City - VARCHAR(24)
       6. State - VARCHAR(2)
       7. Zip – INT(10)
       8. Phone - VARCHAR(24)
       9. Email - VARCHAR(24)
   12. CounselingLog Table Fields:
       1. sessionID - VARCHAR(24) – Primary Key
       2. Room - VARCHAR(24)
       3. CounselorID - VARCHAR(24)
       4. ClientID - VARCHAR(24)
       5. SessionStart - VARCHAR(24)
       6. SessionEnd - VARCHAR(24) – Default = NULL
       7. Date - VARCHAR(24)
       8. Duration - VARCHAR(24) – Default = NULL
   13. State and City tables
   14. In the Source Code folder there are 2 .sql files. Use the provided SQL to create and fill both the state and cities\_extended tables.
3. Drupal
   1. [Initial Installation Instructions](https://www.digitalocean.com/community/tutorials/how-to-install-drupal-on-an-ubuntu-14-04-server-with-apache)
   2. Download [Venture Theme](https://www.drupal.org/project/venture_theme) onto your computer
   3. Navigate to Drupal home page at (Server Name)
   4. Navigate to Appearance and click on “Install new theme”
   5. Upload Venture Theme file and install
   6. Set Venture Theme as default
   7. Add desired users to Drupal
   8. Enable php module in the Modules page
   9. Add 5 pages: Sessions, Clients, Counselors, Add Counselor, Add Client
   10. Copy and paste provided php files into each page Sessions – Sessions.php, Clients – ManageClients.php, Counselors – ManageCounselors.php, Add Counselor – AddCounselor.php, Add Client – AddClient.php
   11. You will have to go into each of these files and change to node redirects to the proper page node addresses
   12. In any of the PHP files that connect to the database, you will have to change the Database variables. These are usually located at the top of the file and are easy to fine. Look for words like “localhost” and “testuser”
4. Server Side PHP
   1. Navigate to your html folder on the server /var/www/html
   2. Create a directory named “LWC” sudo mkdir LWC
   3. Navigate to the included source code folder and open the PHP Server Side folder.
   4. Move the included files to the LWC folder you just made
   5. You will have to change the javascript redirects to the page of your choice within each php file.
5. Script
   1. Navigate to the home folder on the laptop or linux device you will be running the script on
   2. Create a folder called LWC
   3. Copy the included script file that is in the source code folder to the LWC folder
   4. Create a folder within LWC called Rooms
   5. Copy the 8 room text files that were included in the source code folder to the Rooms folder on the laptop.
   6. Open lwcScript.sh and edit each SQL statement within the script to change the ssh username to your username and all ip’s to the server ip address.
   7. While in the LWC folder, enter the following into the command line: sudo chmod +x lwcScript.sh (This makes the file executable)
   8. To run the script, enter: ./lwcScript.sh while in the home folder
   9. For some devices you may have to run “vi” and edit the script – sudo vi lwcScript.sh
   10. In the vi command line, enter “:set filetype=unix” hit enter then type “:x!” to save the file
   11. Open the script and read the commented instructions for further setup
6. RFID Reader
   1. The system comes with 8 room cards that are hard coded in the room files. Counselor and Client cards are addable by scanning the card into the ID field on the Add Client and Add Counselor form. No other setup is necessary
   2. Plug the RFID reader into the laptop/pi USB port
7. Database login files
   1. Within the LWC folder, create 2 new text files. auth.txt and auth2.txt. In auth.txt, add your database password. In auth2.txt, enter your database username. Save both and exit.
8. Session ID File
   1. Within the LWC folder, create a txt file called sessionID.txt and insert a 0 in the file and save.
9. Sound Files
   1. Within the LWC folder, insert the provided audio files.
   2. In your terminal enter “sudo apt-get install sox”
   3. This is the audio player we use for the script.
10. [RSA-Key](http://www.cyberciti.biz/faq/linux-generating-rsa-keys/)
    1. Open terminal on your laptop and type in ssh-keygen –t rsa
    2. Hit enter through all prompts
    3. Type in ssh-copy-id userName@serverip
    4. Attempt to login to the remote server with ssh yourusername@serverip
    5. This process allows the script to enter data in the database without password login.
11. Raspberry Pi
    1. Follow the same instructions as you did for the laptop, folders, files, and RSA key. You will need to install vim on first installation of the script.
    2. Use vim to set the filetype of the script as explained above
    3. The Script should run as expected.
    4. Connect the pi to an audio output device