Database

The system requires one database divided into two parts, one will be used to store the users that have signed up to use the mobile application and another to store all the gathered data from the room. The mobile application user’s database is a MySQL database on Apache server; its main purpose is to store the information of users that sign up for the application. This information consists a username and an encrypted password which will allow the user enter the mobile application. The second database, will be used to receive data from the hardware while it is observing the room. This data will be stored in the database which can be retrieved by the mobile application to display all the data gathered to the user. Both databases are still in development.

Build Instructions

The Database holds the users login information along with each users retrieved data sent from the Raspberry Pi. To make the database specific to our system follow these steps.

Setting Up Apache Server with PHP, MySQL and PHPMyadmin

- Download the latest Apache Version from the official Website [https://www.apachelounge.com/download/](https://www.youtube.com/redirect?q=https%3A%2F%2Fwww.apachelounge.com%2Fdownload%2F&v=dfly7eNym4Y&event=video_description&redir_token=sIMQkgRNUs6gJYBcKducMgvGXXp8MTUyMTU3MTEwMUAxNTIxNDg0NzAx) (this is a Zip-File)

- Copy Apache24 folder from Zip-File to your C: Drive

- Navigate into C:/Apache24/bin

-Open file --httpd-- with Rightclick -- Run as Administrator

- Open Start-menu -- Type in : cmd -- Right Click -- Run as Administrator

-Type in CMD ---- cd /Apache24/bin

- Type in -- httpd -k install -- leave CMD open

-Download !!THREAD SAFE!! Version of PHP from :[http://windows.php.net/download#php-7.0](https://www.youtube.com/redirect?q=http%3A%2F%2Fwindows.php.net%2Fdownload%23php-7.0&v=dfly7eNym4Y&event=video_description&redir_token=sIMQkgRNUs6gJYBcKducMgvGXXp8MTUyMTU3MTEwMUAxNTIxNDg0NzAx)

-Open PHP Zip-File

-Create folder --PHP-- in the C: Drive

-Copy Content of PHP Zip-File to C:/PHP/

- Go to C:/PHP

-Search for File with name: "php7apache2\_4.dll" and copy the name

-Go to C:/Apache24/conf

-Open File "httpd" with Editor

- Scroll to bottom and add the following Code:

" LoadModule php7\_module "C:/PHP/php7apache2\_4"

AddHandler application/x-httpd-php .php

PHPIniDir C:/PHP "

- Search for line " DirectoryIndex index.html " Change to: "DirectoryIndex index.php index.html"

- Save and close

- Go back to CMD and type in " httpd -k restart "

- Download MySQL from : [http://dev.mysql.com/downloads/window...](https://www.youtube.com/redirect?q=http%3A%2F%2Fdev.mysql.com%2Fdownloads%2Fwindows%2Finstaller%2F5.7.html&v=dfly7eNym4Y&event=video_description&redir_token=sIMQkgRNUs6gJYBcKducMgvGXXp8MTUyMTU3MTEwMUAxNTIxNDg0NzAx)

- Install MySQL with downloaded installer "Developer Default"

- During Installation choose ROOT Password and save it for later use

- Download phpMyAdmin from : [https://www.phpmyadmin.net/](https://www.youtube.com/redirect?q=https%3A%2F%2Fwww.phpmyadmin.net%2F&v=dfly7eNym4Y&event=video_description&redir_token=sIMQkgRNUs6gJYBcKducMgvGXXp8MTUyMTU3MTEwMUAxNTIxNDg0NzAx)

- Copy Folder in Zip File into C:/Apache24/htdocs

- Rename copied folder into "phpmyadmin"

- Navigate to C:/PHP

- Rename File "php.ini-production" to "php.ini"

- Open php.ini with Editor

- Search for Line "extension=php\_mbstring.dll"

- Remove Semicolon ";" in front of "extension=php\_mbstring.dll" and "extension=php\_mysqli.dll"

-Save Exit - Open CMD and Type in " httpd -k restart "

Alternatively, you can utilize hostinger at [www.hostinger.com](http://www.hostinger.com/). Here you just have to sign up and you will have apache, mysql and phpMyadmin at your disposal.