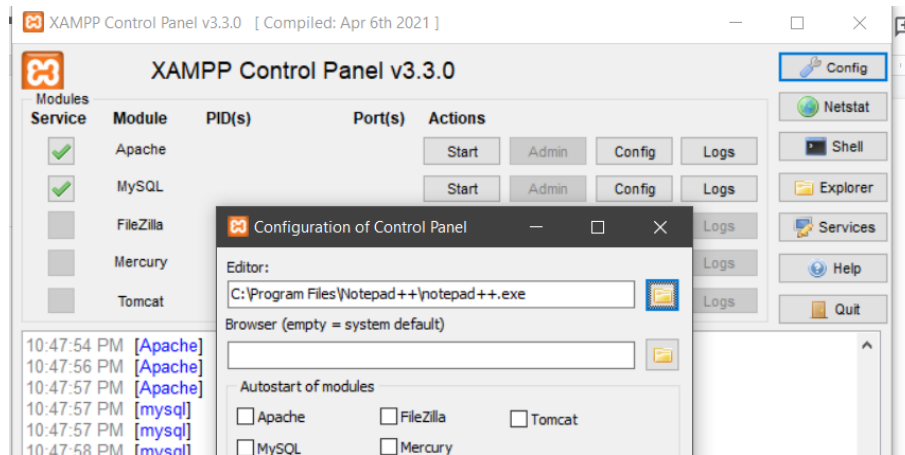


Install XAMPP

- <https://www.apachefriends.org/index.html>
- Install

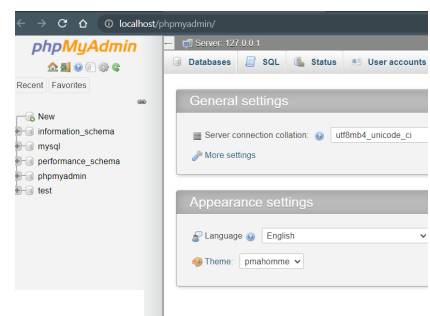
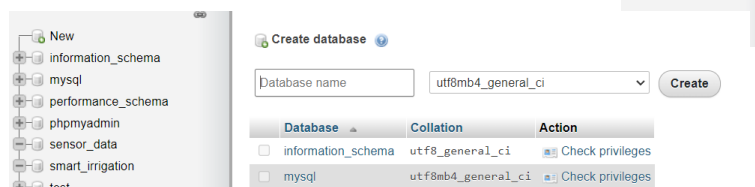


Setup a webserver using XAMPP

- All the http servers are kept in **xampp>htdocs**
- Create a new folder and name it as per the website you want, make another folder inside, name it public, example: dev.smartirrigation.com/public
 - Make sure to put the html files, **index.html** has to be there.
- Then edit, **C:\xampp\apache\conf\extra\httpd-vhosts.conf**
 - Add at the bottom
 - <VirtualHost dev.smartirrigation.com:8080>
 - ServerName dev.smartirrigation.com
 - DocumentRoot
 - "C:\xampp\htdocs\dev.smartirrigation.com\public"
 - <Directory "C:\xampp\htdocs\dev.smartirrigation.com\public">
 - Require all granted
 - AllowOverride All
 - </Directory>
 - </VirtualHost>
- Then edit, **C:\Windows\System32\drivers\etc\hosts**
 - Add at the bottom
 - 127.0.0.1 dev.smartirrigation.com
- Restart **apache** from the **xampp control panel**
- Open browser and enter the url

Creating database for sensor data

- Click on **Xampp > MySQL > Admin**
- phpMyAdmin will open in browser:
- Now create a new database, name it **smart_irrigation**



- Then create a table in the new database

- name it **sensor_data**
- Since we have Temperature, Humidity, moisture and pump status, moisture threshold we will need 1 column for each, ID then value. Also we'll add a time stamp in one column. So 7 columns.
- Then fill out the column properties

Name	Type	Length/Values	Default	Collation	Attributes	Null	Index	Comments
ID	BIGINT		None			<input type="checkbox"/>	PRIMARY	<input checked="" type="checkbox"/>
tem	FLOAT		None			<input checked="" type="checkbox"/>	---	<input type="checkbox"/>
hum	FLOAT		None			<input checked="" type="checkbox"/>	---	<input type="checkbox"/>
moist	FLOAT		None			<input checked="" type="checkbox"/>	---	<input type="checkbox"/>
pump_stat	INT		None			<input checked="" type="checkbox"/>	---	<input type="checkbox"/>
date	TIMESTAMP		CURRENT_TIMESTAMP			<input type="checkbox"/>	---	<input type="checkbox"/>

- Then click **save**, after saving the following screen will come

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/> 1	ID	bigint(20)			No	None		AUTO_INCREMENT	Change Drop More
<input type="checkbox"/> 2	pump_stat	int(11)			Yes	NULL			Change Drop More
<input type="checkbox"/> 3	moist_thresh	float			Yes	NULL			Change Drop More
<input type="checkbox"/> 4	temp	float			Yes	NULL			Change Drop More
<input type="checkbox"/> 5	hum	float			Yes	NULL			Change Drop More
<input type="checkbox"/> 6	moist	float			Yes	NULL			Change Drop More
<input type="checkbox"/> 7	date	timestamp			No	current_timestamp()			Change Drop More

- You will find the table under the **smart_irrigation** database > **sensor_data** > structures

Writing PHP for database

- Create a new php file or copy the needed php file into **dev.smartirrigation.com/public** folder.