GEOSPATIAL DATA MANAGEMENT

Project Topic:

Implementation of a database system of Hacettepe University Geomatics Engineering Department (Guide App)

GUIDELINES

1)Creating a database and table via PostgreSQL DBMS.

2)Creating a localhost site with gathering informations from our DBMS and linking this project to a web-based Project.

3)Writing html codes with php for the website.

NEEDED PROGRAMS FOR THE PROJECT

 PostgreSQL XAMPP Apache Web Server Visual Studio Code

Firstly,to make a clean start I created a scheme and a flowchart that I will use as tables in PostgreSQL.

I created a database in PostgreSQL named guideApp_DB.And then I created an admin table.We added id,username and password also.The main goal for the admin panel was to control who can add,delete or change data after the creation of a web-based system.
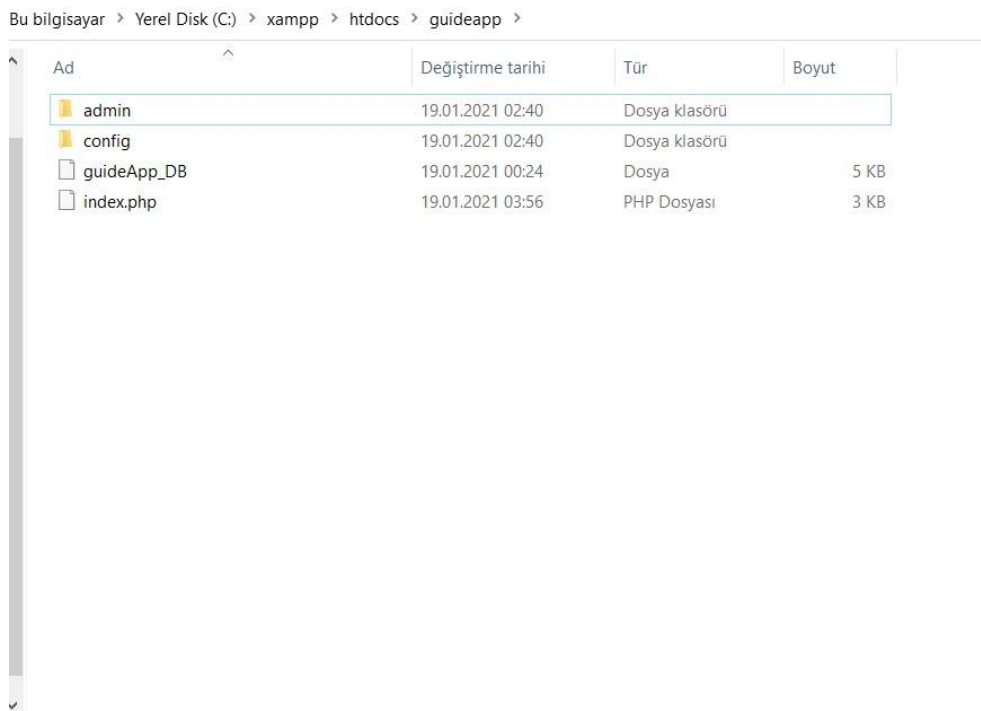
After,I created a table named teacher to add the people to our database for those who work at the Hacettepe University Geomatics Engineering Department.

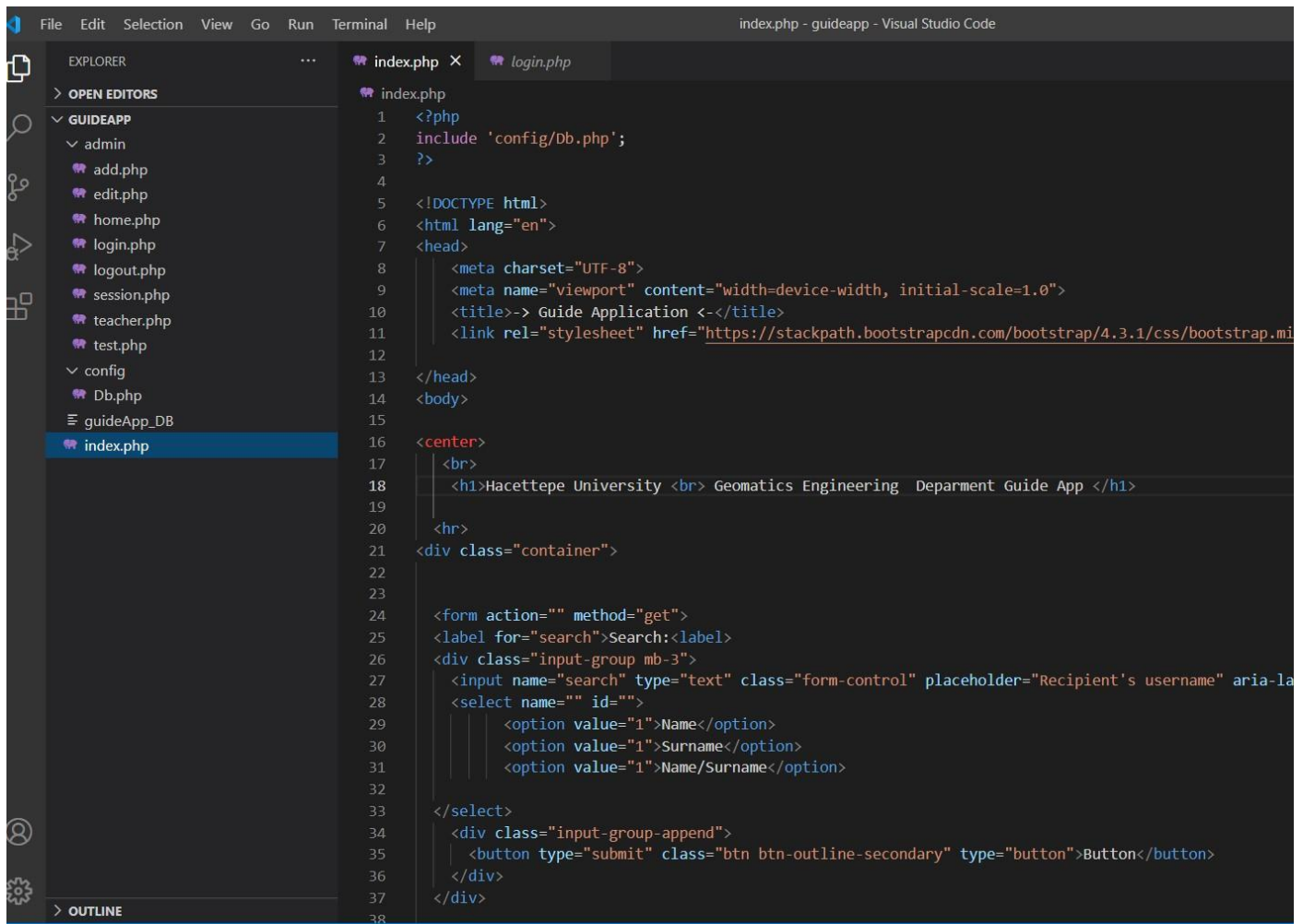| id [PK] integer	name character varying	surname character varying (50)	telephone_number character (11)	address character varying (300)	mail character varying (50)	department character varying (70)	degree character varying (30)
7	Berk	Anbaroğlu	05458965125	Çayyolu	banbar@gmail.com	1	Dr.
8	Cevdet Coşkun	Aydın	05412354856	Keçiören	ceaydin@hacettepe.edu.tr	1	Lecturer
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11	Gonca Okay	Ahi	05354568725	Elvankent	goncaokayahi@hacettepe.e...	1	Dr.
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Then,I installed a control panel named XAMPP.It is a web server solution stack package consisting Apache,MariaDB etc..
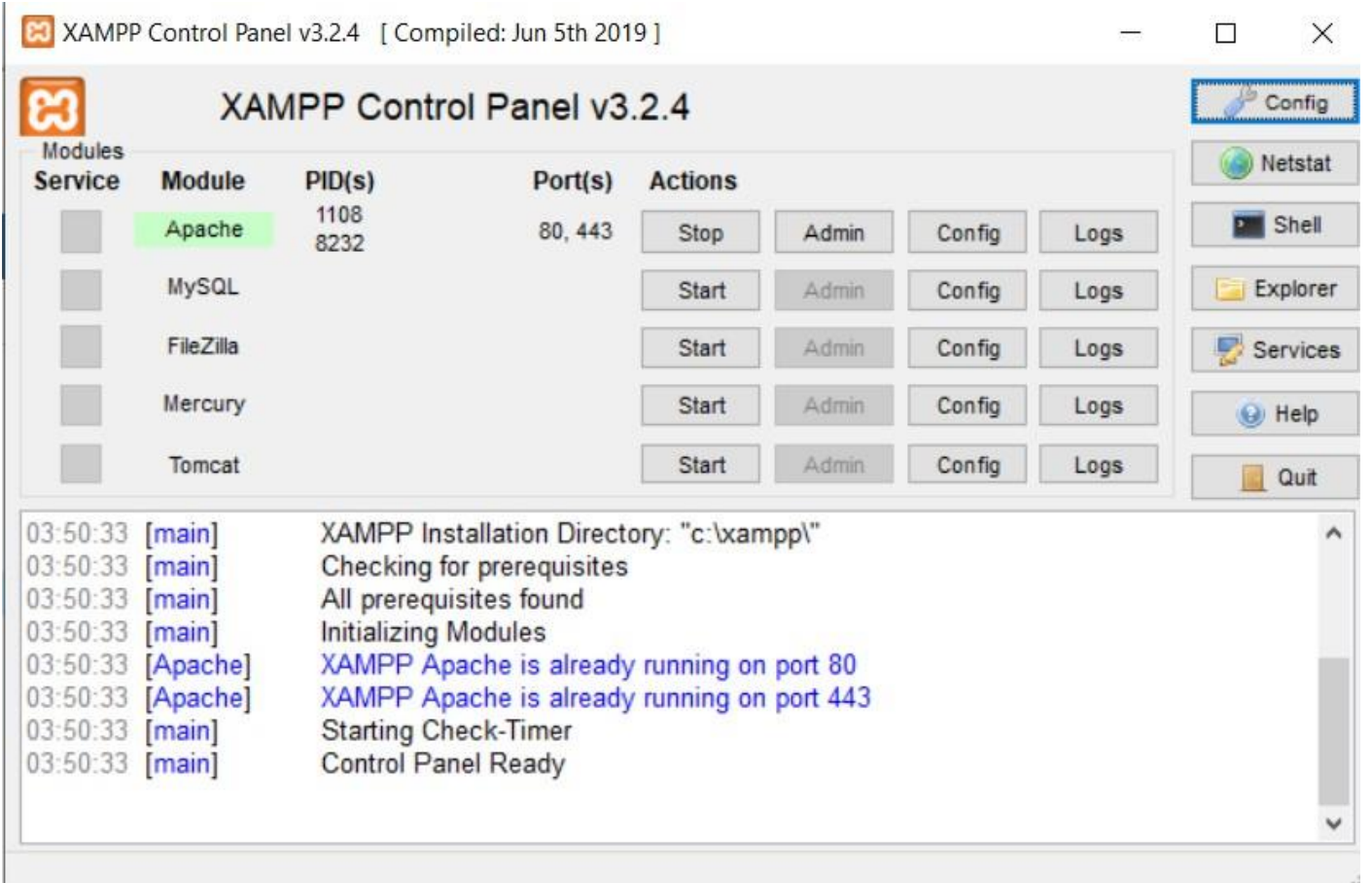
With this program when I activate Apache module and write localhost/guideapp the web-site works successfully.

Bu bilgisayar > Yerel Disk (C:) > xampp > htdocs > guideapp >

Ad	Değiştirme tarihi	Tür	Boyut
admin	19.01.2021 02:40	Dosya klasörü	
config	19.01.2021 02:40	Dosya klasörü	
guideApp_DB	19.01.2021 00:24	Dosya	5 KB
index.php	19.01.2021 03:56	PHP Dosyası	3 KB

I created a folder named GuideApp and then added admin,config and index folder for the creation of the web-site with php programming language via Visual Studio Code.

For the Apache module to understand that the needed codes are written in php language we opened php tags for both the start and the end of the code.

After that,I created config.php and wrote php codes to get the datas from PostgreSQL and not to write it every time when we needed to get the information from DBMS.

```php
config > 🐘 Db.php
  1    <?php
  2
  3    try {
  4
  5        $db = new PDO('pgsql:host=localhost;dbname=guideApp_DB', 'postgres', '123');
  6
  7        } catch(PDOException $e) {
  8          echo 'Connection Error: ' . $e->getMessage();
  9        }
 10
 11
 12
```

As you can see from above, you need the database guideApp_DB imported to your DBMS to start the localhost/guideapp.

From
https://geomatik.hacettepe.edu.tr/tr/menu/akademik_personel

site I got the name,surname,phone number,degree and mail of the academic personnel to use it on our web-site.

Hacettepe University
Geomatics Engineering Deparment Guide App

Search:

Recipient's username		Name ▼	Button

id	Name	Surname	Degree	Department	Telephone Number	Mail	Faculty	Adress
7	Berk	Anbaroğlu	Dr.	1	05458965125	banbar@gmail.com	Berk	Çayyolu
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9	Mustafa	Türker	Professor	1	05384562315	mturker@hacettepe.edu.tr	Mustafa	Ümitköy
10	Kamil	Teke	Dr.	1	05215698456	kteke@hacettepe.edu.tr	Kamil	Konutkent
11	Gonca Okay	Ahi	Dr.	1	05354568725	goncaokayahi@hacettepe.edu.tr	Gonca Okay	Elvankent
12	Berkay	Bahadur	Research Assistant	1	05485623541	berkaybahadur@hacettepe.edu.tr	Berkay	Eryaman
13	Azer	İlgar	Research Assistant	1	05454125687	ilgar@hacettepe.edu.tr	Azer	Batıkent
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15	Raziye	Arslan	Computer Operator	1	05395468210	rarslan@hacettepe.edu.tr	Raziye	Altındağ
16	Kemalettin	Öztaş	Tecnician	1	05458456532	koztas@hacettepe.edu.tr	Kemalettin	Atapark
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18	Zeynep	Esirgenci	Student	1	05384562138	zeynepesirgenci@gmail.com	Zeynep	Yenimahalle

You can see the final version of our app from above.To create a good look for the design i used to BootStrap Library

```php
<?php
include 'config/Db.php';
?>

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>-> Guide Application <-</title>
    <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css" integrity="sha384-ggOyR0iXCbMQ

</head>
<body>
```

 Head part of the index code.

Also when you write http://localhost/guideapp/admin/ it allows you to add teacher and automatically syncs the datas with the PostgreSQL at the same time.

Hacettepe University Guide App

Site Page Home Add Teacher Logout

Degree :

Research Assistant

Name :

Enter Name

Surname :

Enter Surname

Telephone :

Enter Telephone

Email Address :

Enter mail

Deparment

1

Adress

Submit

WITH OUR BEST REGARDS

References

https://geomatik.hacettepe.edu.tr/tr/menu/akademik_personel-44

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