

DOE Spectra Search Project Help Manual

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Github Setup

If you've never used git or github before, there are a bunch of things that you need to do. It's [very well explained on github](#), but repeated here for completeness.

- Get a [github](#) account.
- Download and install [git](#).
- Set up git with your user name and email.

Open a terminal/shell and type:

```
$ git config --global user.name "Your name here"
$ git config --global user.email "your\_email@example.com"
```

(Don't type the \$; that just indicates that you're doing this at the command line.)

Node.js & NPM Setup

How to Install Node.js and NPM on Windows

Step 1: Download Node.js Installer

In a web browser, navigate to <https://nodejs.org/en/download/>. Click the Windows Installer button to download the latest default version. At the time this article was written, version 10.16.0-x64 was the latest version. The Node.js installer includes the NPM package manager.

Step 2: Install Node.js and NPM from Browser

1. Once the installer finishes downloading, launch it. Open the downloads link in your browser and click the file. Or, browse to the location where you have saved the file and double-click it to launch.
2. The system will ask if you want to run the software – click Run.
3. You will be welcomed to the Node.js Setup Wizard – click Next.
4. On the next screen, review the license agreement. Click Next if you agree to the terms and install the software.
5. The installer will prompt you for the installation location. Leave the default location, unless you have a specific need to install it somewhere else – then click Next.
6. The wizard will let you select components to include or remove from the installation. Again, unless you have a specific need, accept the defaults by clicking Next.
7. Finally, click the Install button to run the installer. When it finishes, click Finish.

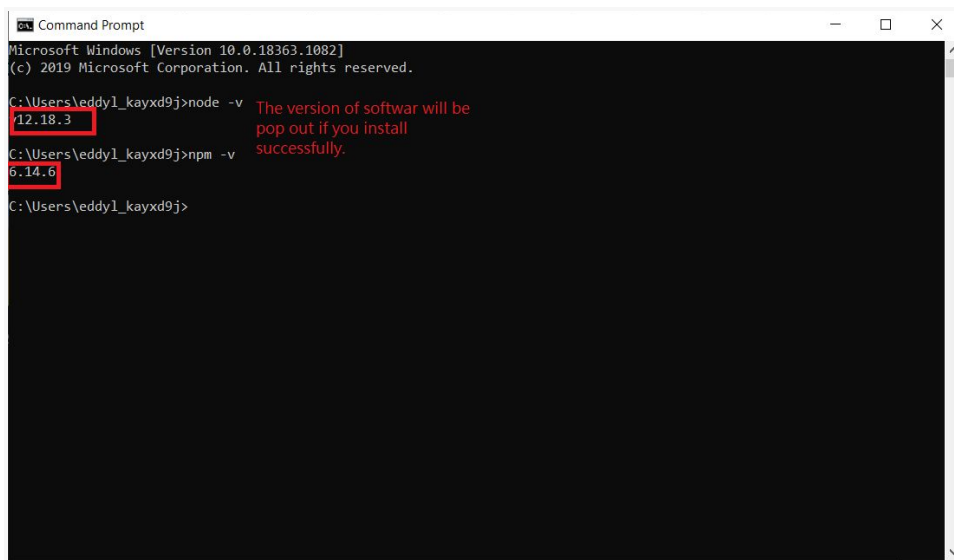
Step 3: Verify Installation

Open a command prompt (or PowerShell), and enter the following:

```
node -v
```

The system should display the Node.js version installed on your system. You can do the same for NPM:

```
npm -v
```



```
Command Prompt
Microsoft Windows [Version 10.0.18363.1082]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\eddy1_kayxd9j>node -v
v12.18.3
The version of software will be
pop out if you install
successfully.

C:\Users\eddy1_kayxd9j>npm -v
6.14.6

C:\Users\eddy1_kayxd9j>
```

(May indicate what the successful result should look like)

Installing AMPPS

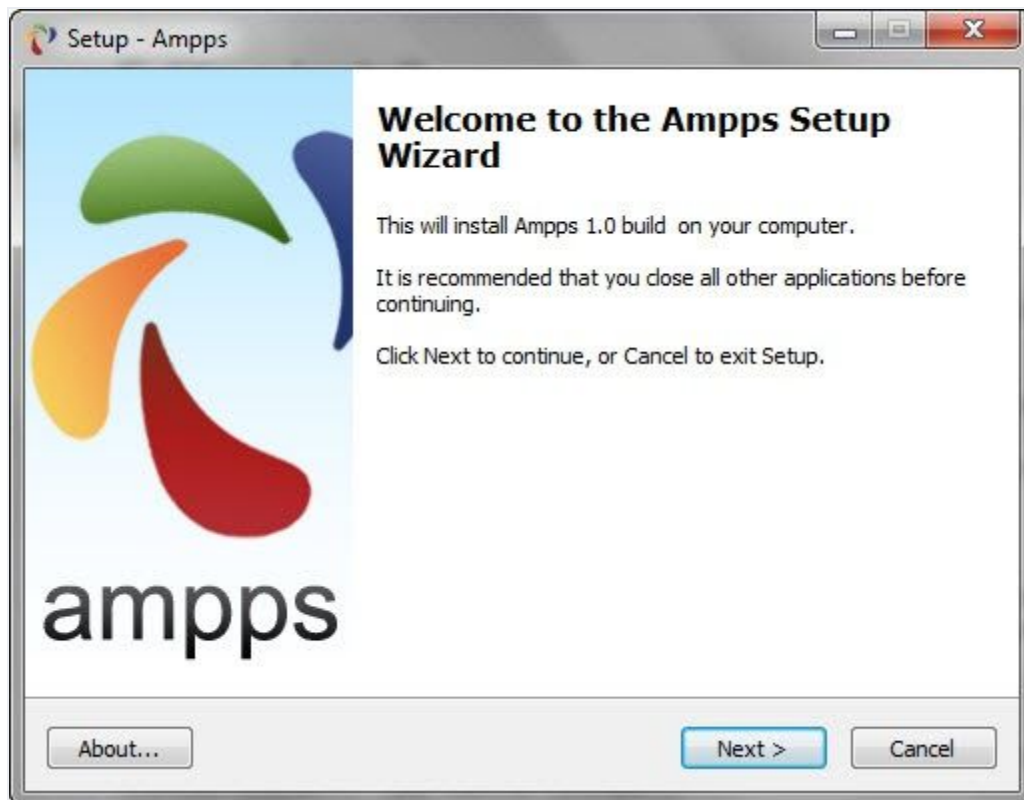
System Requirements

Supported Operating Systems are Windows 10, 8 or 7, Windows Vista SP2, Windows XP SP3+, Windows Server 2003 SP2+, Windows Server 2008, Windows Server 2008 R2. **Note** :You must have administrator privileges on your computer to run AMPPS.

Installation

- Download the setup from [AMPPS Website](#)
- Start the installation by opening the .exe downloaded from the website.

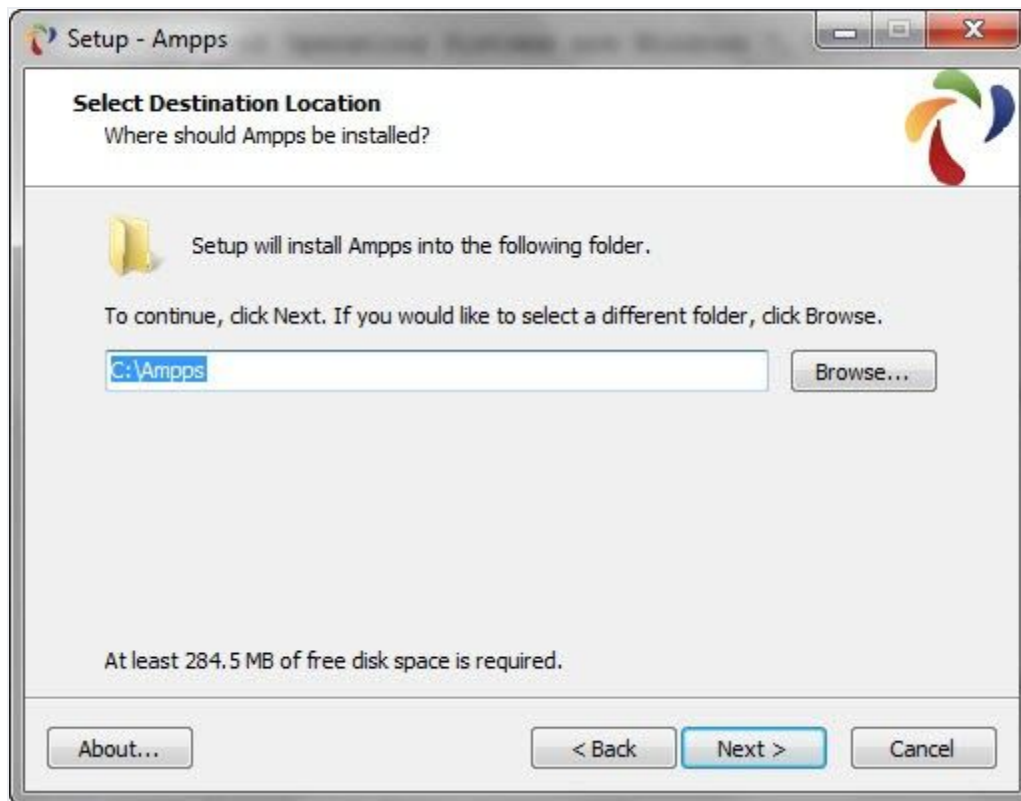
You will see:



- This will set up the required Web Server and other important configurations.

Set Path

- The wizard will ask the path to AMPPS.



Setup Completed

- You will see a screen as follows when the setup is finished.



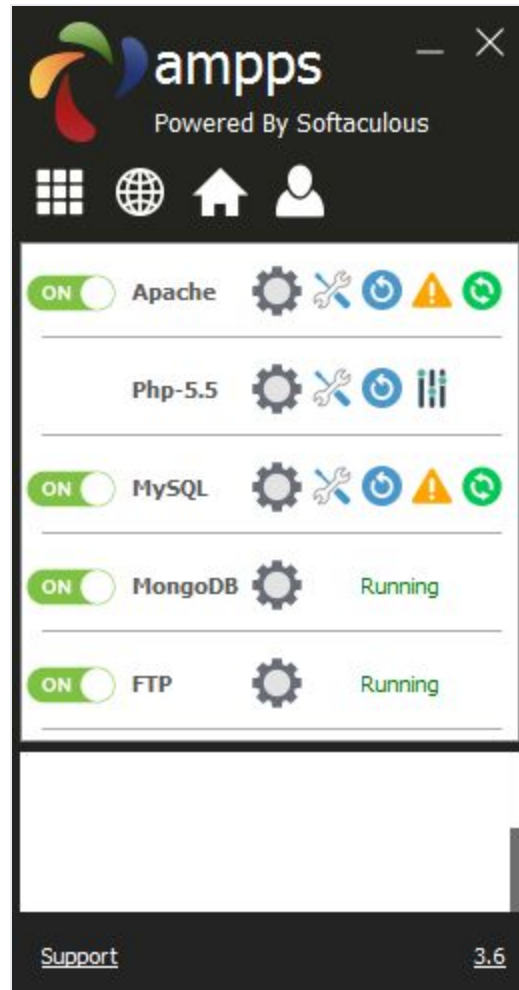
First Run of AMPPS

- When you run AMPPS for the first time make sure your Internet connection is active.

Note: AMPPS doesn't support proxy yet. So you must have a **Direct Internet Connection**.

- After Installing AMPPS, open **path/to/Ampps/Ampps.exe**, this will take some time as it is setting up AMPPS for your Windows.
- If you are facing any issues, please open a ticket at [Support](#)

Just a Screenshot of Softaculous AMPPS !



AMPPS Panel

AMPPS Panel has two sections :

Admin Panel

Go to Admin Panel

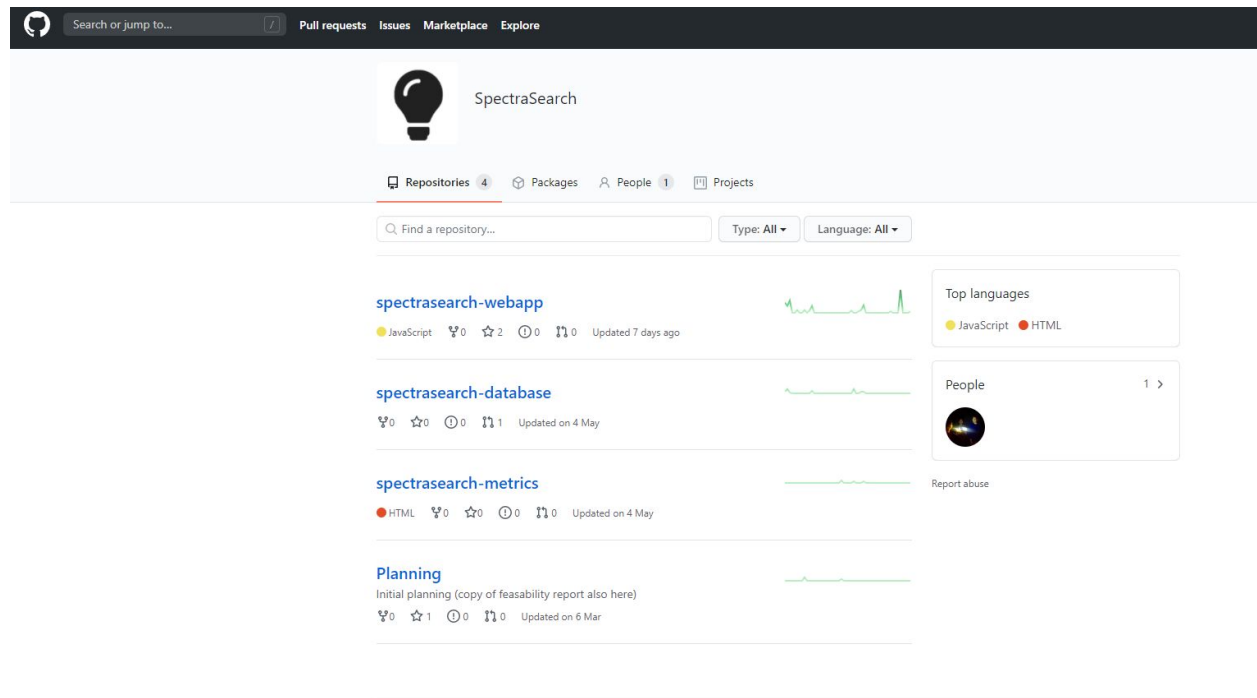
Use the url to access phpmyadmin

To access phpMyAdmin, visit url <http://localhost/phpmyadmin>

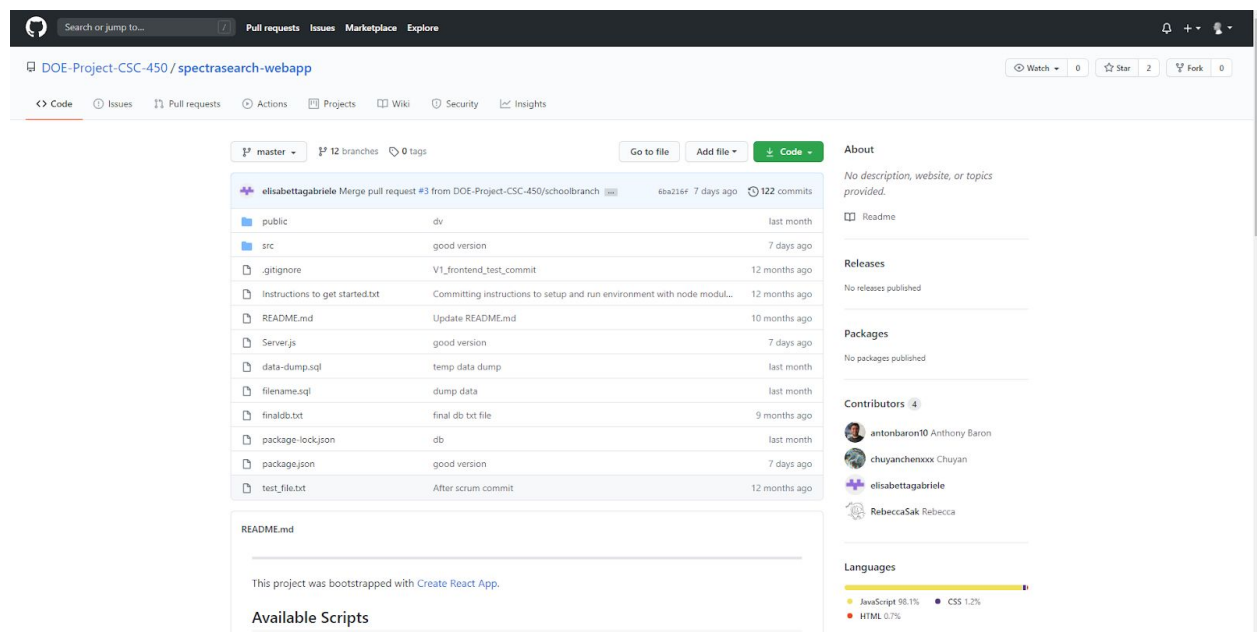
Now that we are set to go, we need to access the repo:

<https://github.com/DOE-Project-CSC-450>

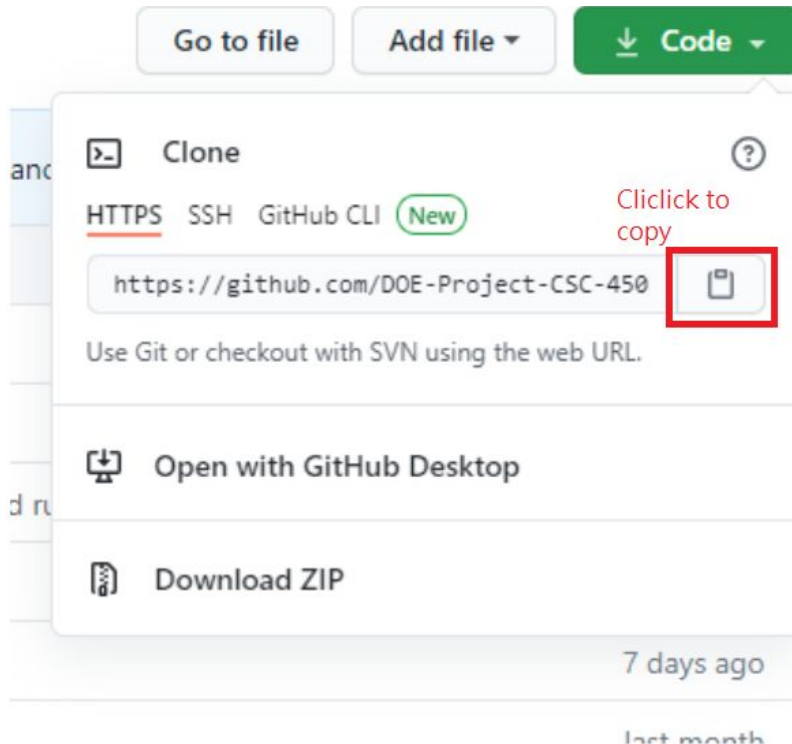
This will hold all the work for that was done on the DOE project since the start of it.



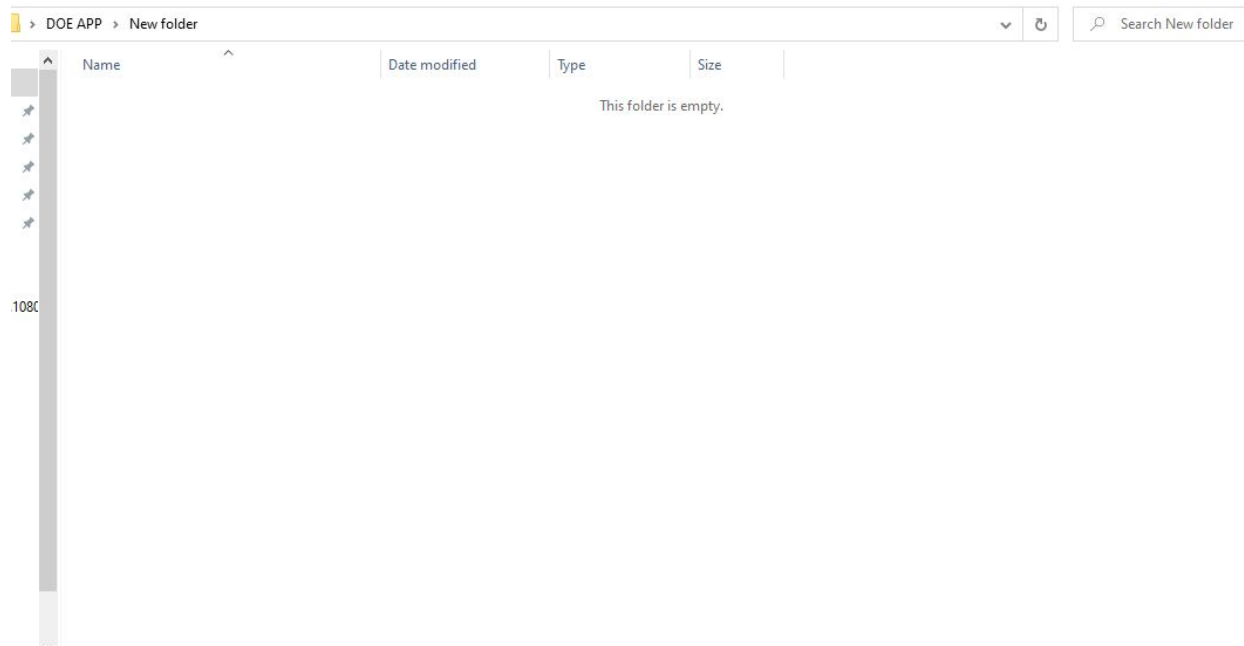
Most of the work done will be on the “**spectrasearch-webapp**” repo. Click it.



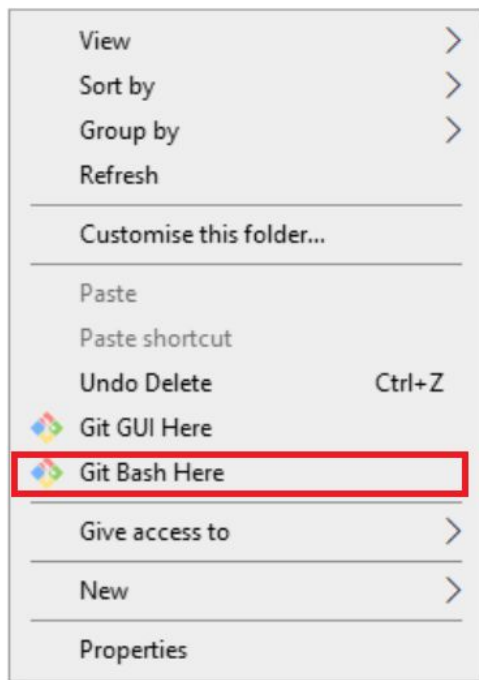
Click “**Code**” the green button. Upon doing so you will see this:



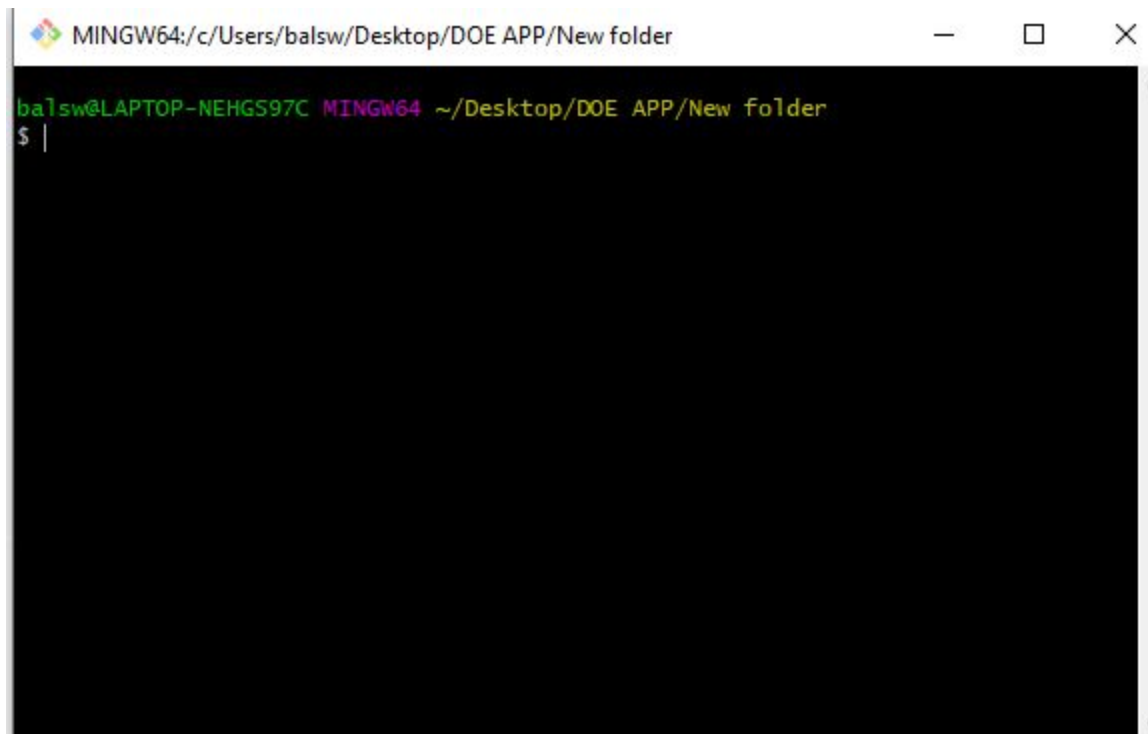
Copy the link you see in front of you and navigate a folder with in you device



Right click in the folder and this menu will pop out:

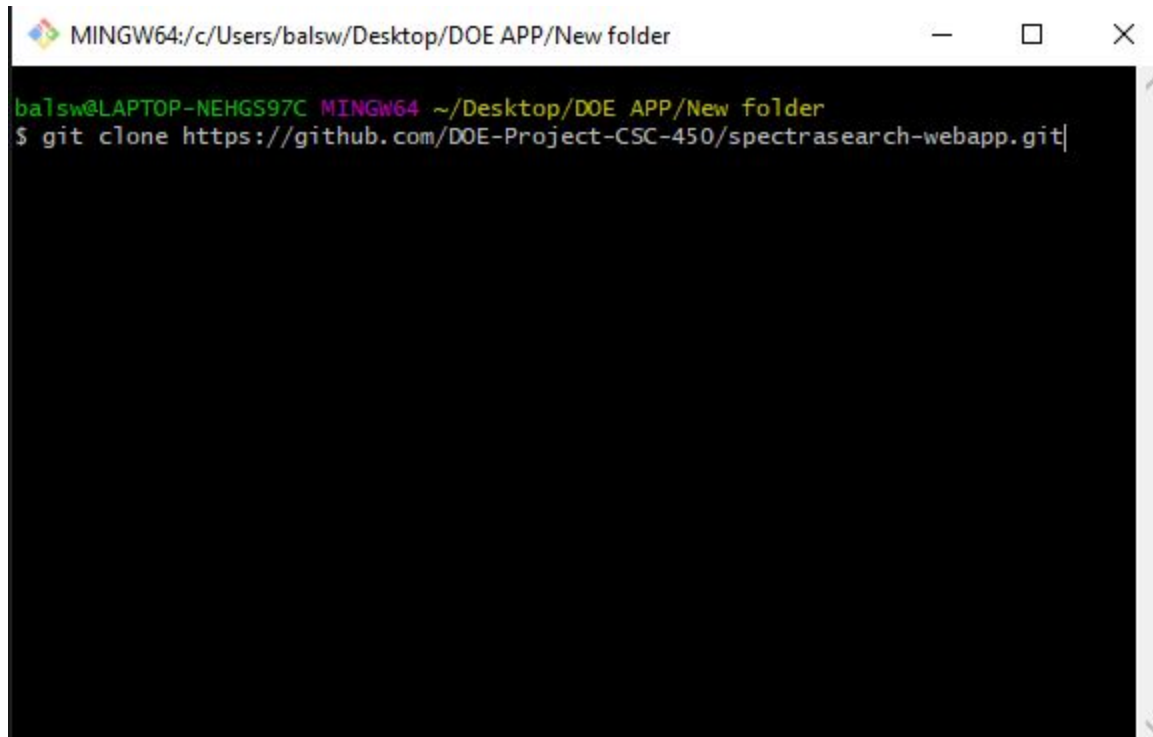


Click **Git Bash Here**. You will find this window:



Type the following command:

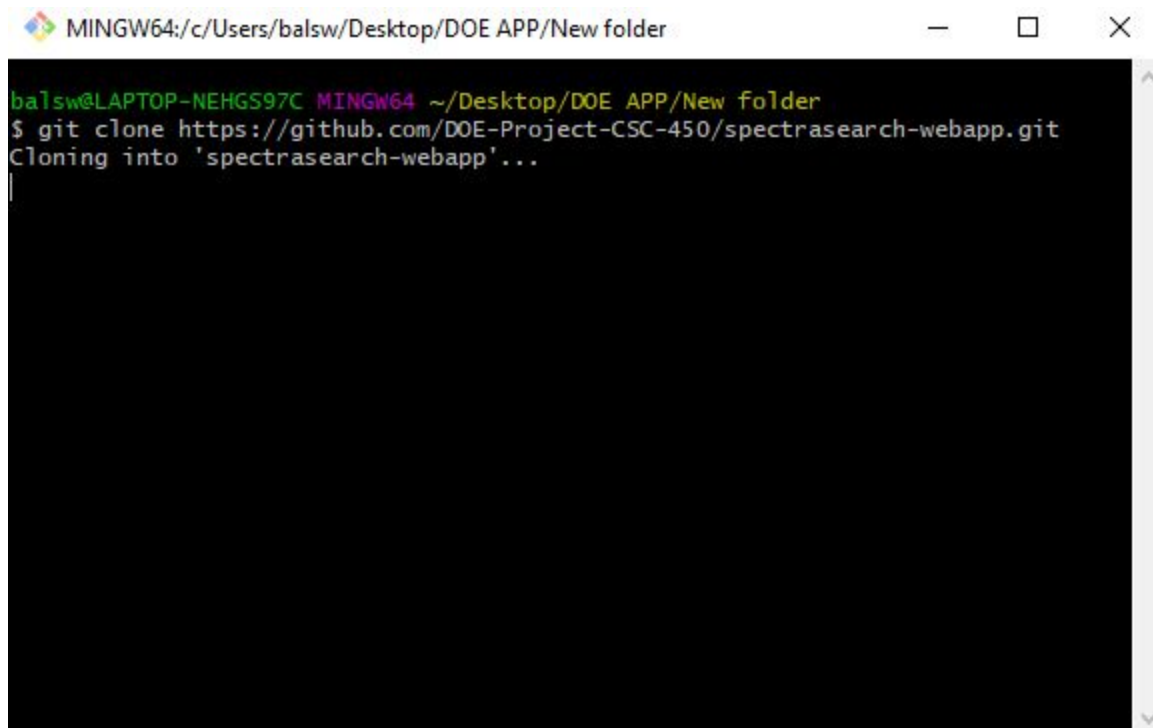
Git clone and the link you just copied from github. Sp you have something like that:



A terminal window titled "MINGW64:/c/Users/balsw/Desktop/DOE APP/New folder". The prompt is "balsw@LAPTOP-NEHGS97C MINGW64 ~/Desktop/DOE APP/New folder". The command entered is "\$ git clone https://github.com/DOE-Project-CSC-450/spectrasearch-webapp.git".

```
MINGW64:/c/Users/balsw/Desktop/DOE APP/New folder
balsw@LAPTOP-NEHGS97C MINGW64 ~/Desktop/DOE APP/New folder
$ git clone https://github.com/DOE-Project-CSC-450/spectrasearch-webapp.git
```

Then you click enter:




A terminal window titled "MINGW64:/c/Users/balsw/Desktop/DOE APP/New folder". The prompt is "balsw@LAPTOP-NEHGS97C MINGW64 ~/Desktop/DOE APP/New folder". The command entered is "\$ git clone https://github.com/DOE-Project-CSC-450/spectrasearch-webapp.git". The output is "Cloning into 'spectrasearch-webapp'...".













```
MINGW64:/c/Users/balsw/Desktop/DOE APP/New folder
balsw@LAPTOP-NEHGS97C MINGW64 ~/Desktop/DOE APP/New folder
$ git clone https://github.com/DOE-Project-CSC-450/spectrasearch-webapp.git
Cloning into 'spectrasearch-webapp'...
```

```
MINGW64:/c/Users/balsw/Desktop/DOE APP/New folder
balsw@LAPTOP-NEHGS97C MINGW64 ~/Desktop/DOE APP/New folder
$ git clone https://github.com/DOE-Project-CSC-450/spectrasearch-webapp.git
Cloning into 'spectrasearch-webapp'...
remote: Enumerating objects: 310, done.
remote: Counting objects: 100% (310/310), done.
remote: Compressing objects: 100% (199/199), done.
Receiving objects: 44% (18879/42905), 17.68 MiB | 2.22 MiB/s
```

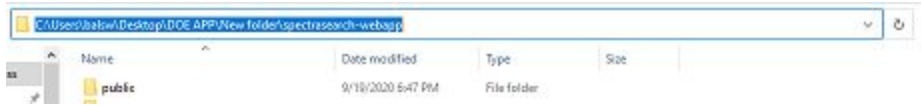
Now it will be cloning the files into your device with the latest version that the team worked on. You should see this folder on the directory you were on:

Name	Date modified	Type	Size
 spectrasearch-webapp	9/19/2020 6:47 PM	File folder	

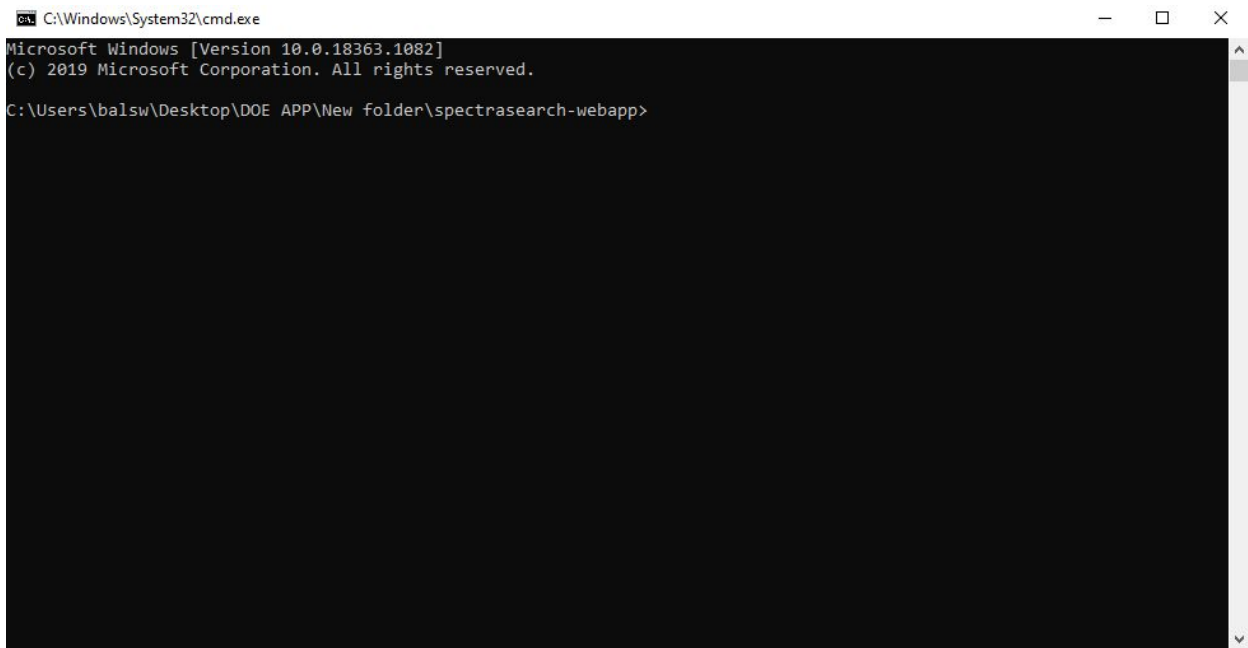
Inside of it these files:

Name	Date modified	Type	Size
 public	9/19/2020 6:47 PM	File folder	
 src	9/19/2020 6:47 PM	File folder	
 .gitignore	9/19/2020 6:47 PM	Text Document	1 KB
 data-dump.sql	9/19/2020 6:47 PM	SQL File	0 KB
 filename.sql	9/19/2020 6:47 PM	SQL File	1 KB
 finaldb.txt	9/19/2020 6:47 PM	Text Document	16 KB
 Instructions to get started.txt	9/19/2020 6:47 PM	Text Document	1 KB
 package.json	9/19/2020 6:47 PM	JSON File	2 KB
 package-lock.json	9/19/2020 6:47 PM	JSON File	651 KB
 README.md	9/19/2020 6:47 PM	MD File	4 KB
 Server.js	9/19/2020 6:47 PM	JavaScript File	7 KB
 test_file.txt	9/19/2020 6:47 PM	Text Document	1 KB

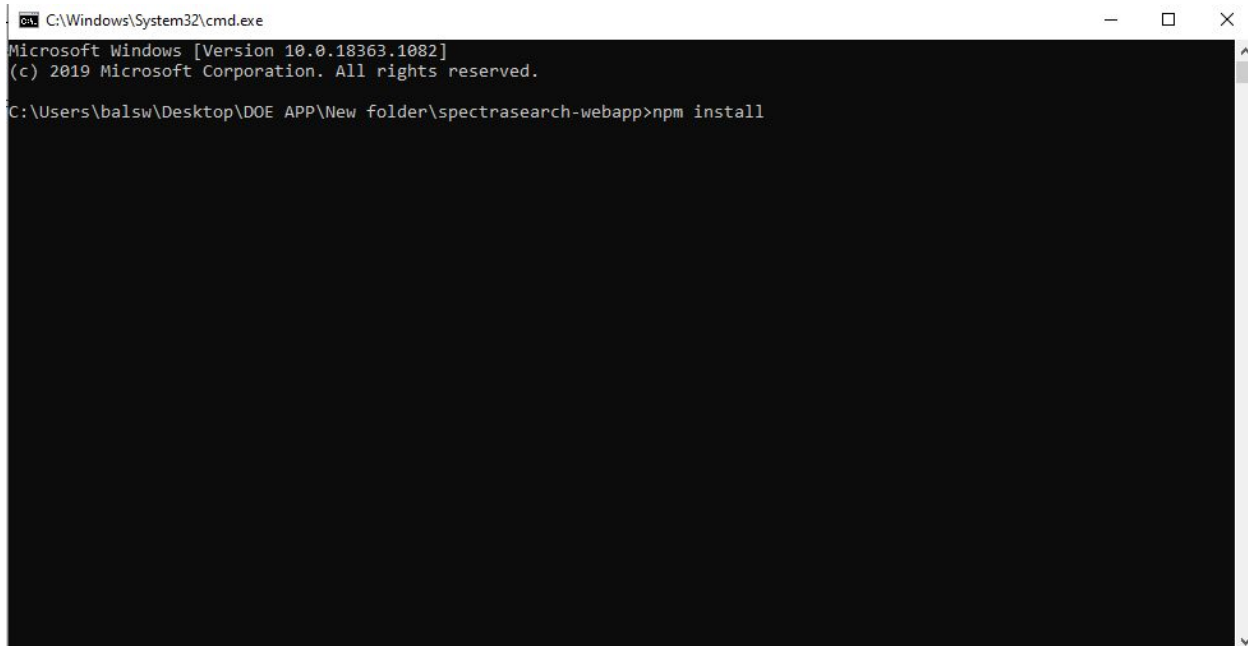
Now navigate to the folder directory where the “spectrasearch-webapp” is seen and click on the white space near it.



When this happens erase it and type “CMD” and then enter. This will pop up:



Type **npm install** and then enter I:



You will see it installing, just like this (It may take time as it preparing the required deployment to run the web app):

```
npm
Microsoft Windows [Version 10.0.18363.1082]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\balsw\Desktop\DOE APP\New folder\spectrasearch-webapp>npm install
[.....] \ loadDep:reduce-css-calc: sill install loadAllDepsIntoIdealTree
```

When it's done you should see something like that:

```
C:\Windows\System32\cmd.exe
> node -e "try{require('./postinstall')}catch(e){}"

npm WARN rollback Rolling back readable-stream@2.3.6 failed (this is probably harmless): EPERM: operation not permitted,
lstat 'C:\Users\balsw\Desktop\DOE APP\New folder\spectrasearch-webapp\node_modules\jest-haste-map\node_modules\fsevents
\node_modules'
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.9 (node_modules\react-d3-library\node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.9: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.9 (node_modules\jest-haste-map\node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.9: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.9 (node_modules\chokidar\node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.9: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@2.0.7 (node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.0.7: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})

added 1784 packages from 915 contributors and audited 1988 packages in 385.627s

4 packages are looking for funding
  run `npm fund` for details

found 39023 vulnerabilities (38989 low, 22 moderate, 12 high)
  run `npm audit fix` to fix them, or `npm audit` for details

C:\Users\balsw\Desktop\DOE APP\New folder\spectrasearch-webapp>
```

Then you will type **npm run build** and hit enter. It will start to build the app as intended before we can run it:

```
C:\Users\balsw\Desktop\DOE APP\New folder\spectrasearch-webapp>npm run build

> my-app@0.1.0 build C:\Users\balsw\Desktop\DOE APP\New folder\spectrasearch-webapp
> react-scripts build

Creating an optimized production build...
Browserslist: caniuse-lite is outdated. Please run next command `npm update`
The prop value with an expression type of AssignmentExpression could not be resolved. Please file issue to get this fixed immediately.
The prop value with an expression type of AssignmentExpression could not be resolved. Please file issue to get this fixed immediately.
The prop value with an expression type of AssignmentExpression could not be resolved. Please file issue to get this fixed immediately.
```

Don't worry about the freak out it's showing. All is good. When it's done you should see something like that:

```
C:\Windows\System32\cmd.exe

Search for the keywords to learn more about each warning.
To ignore, add // eslint-disable-next-line to the line before.

File sizes after gzip:

 499.25 KB  build\static\js\2.0de25af4.chunk.js
  97.2 KB   build\static\css\2.621b5bde.chunk.css
 56.62 KB   build\static\js\main.9212d300.chunk.js
 1023 B     build\static\css\main.6f6baec5.chunk.css
 775 B      build\static\js\runtime-main.d52357dd.js

The project was built assuming it is hosted at the server root.
You can control this with the homepage field in your package.json.
For example, add this to build it for GitHub Pages:

  "homepage": "http://myname.github.io/myapp",

The build folder is ready to be deployed.
You may serve it with a static server:

  npm install -g serve
  serve -s build

Find out more about deployment here:

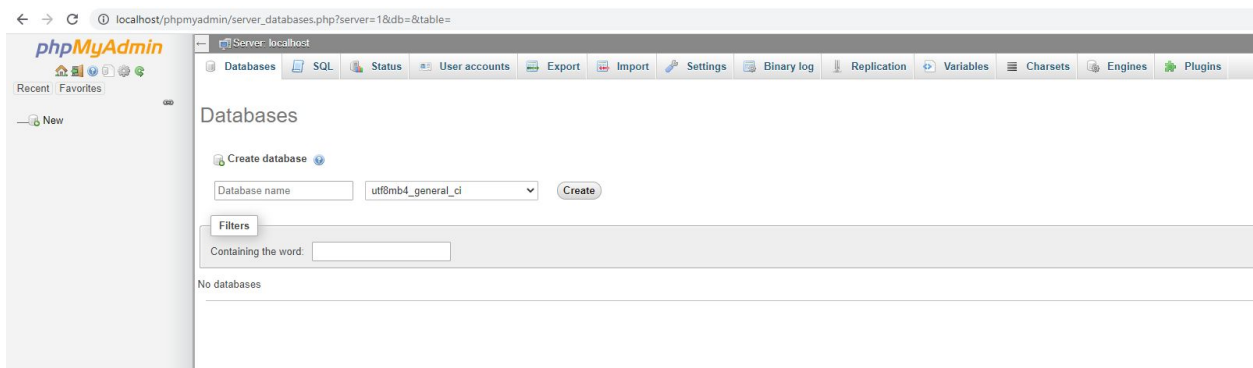
  https://bit.ly/CRA-deploy

C:\Users\balsw\Desktop\DOE APP\New folder\spectrasearch-webapp>
```


Minimize this window for a little bit and navigate to your ampps app icon on the corner near the clock:



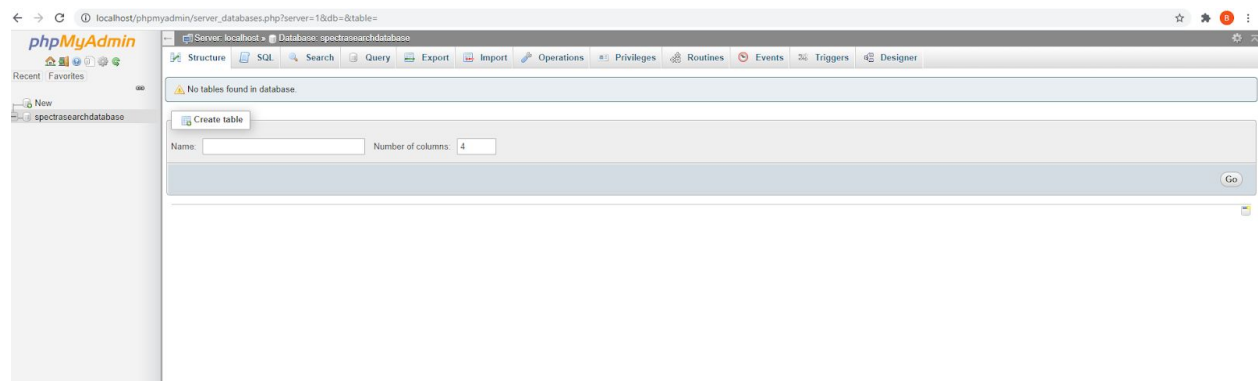
Make sure everything is on as seen in the image. Navigate to your browser after that and type “<http://localhost/phpmyadmin>” on url space. You should see something like this:



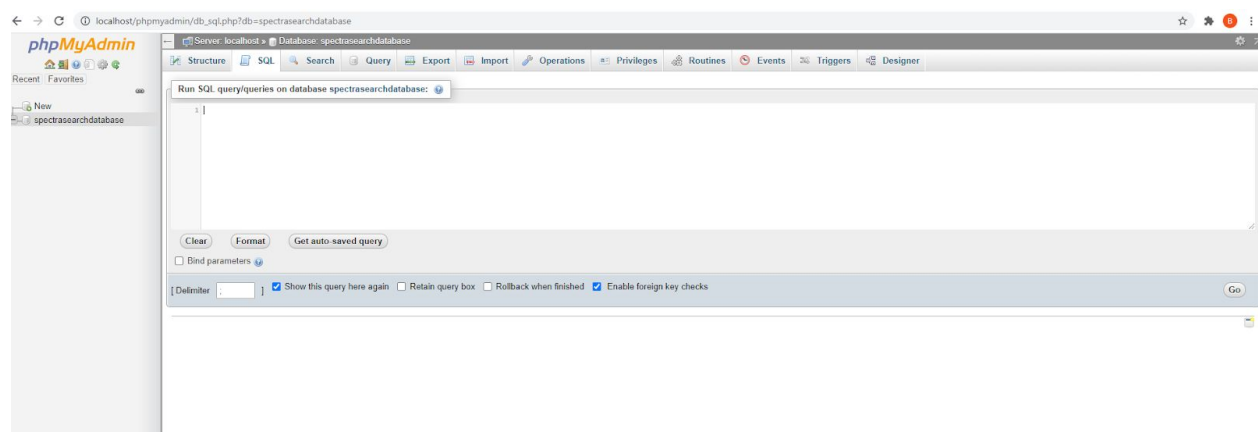
Now you will need to add the database that the web app will be running. Go ahead and type the database as “spectrsearchdatabase” (The name must be typed **exactly** as it is here or else you will encounter errors.) Then press create:



You will see this page after the creation of the database:



Click on SQL. You will find this page:



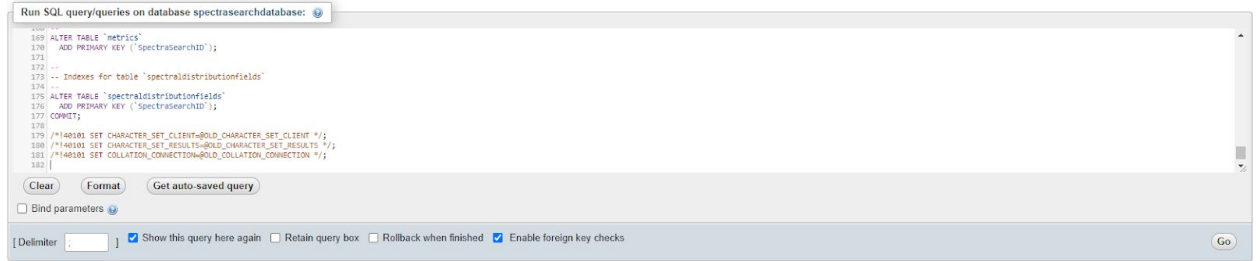
Now copy the following SQL structure commands from the “spectrsearchdatabase.sql” file that was attached in the email sent. It should look something like that:

```

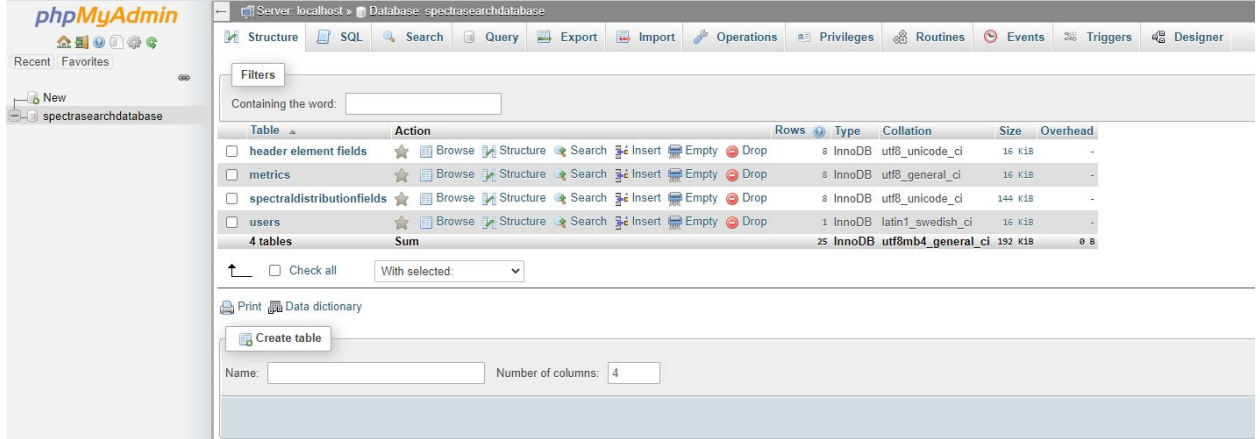
1  -- phpMyAdmin SQL Dump
2  -- version 4.9.1
3  -- https://www.phpmyadmin.net/
4  --
5  -- Host: localhost
6  -- Generation Time: Sep 12, 2020 at 03:40 PM
7  -- Server version: 5.0.18
8  -- PHP Version: 7.3.11
9
10 SET SQL_MODE = "NO_AUTO_VALUE_ON_ZERO";
11 SET AUTOCOMMIT = 0;
12 START TRANSACTION;
13 SET time_zone = "+00:00";
14
15
16 /*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
17 /*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
18 /*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
19 /*!40101 SET NAMES utf8mb4 */;
20
21 --
22 -- Database: 'spectrasearchdatabase'
23 --
24
25 --
26 -- Table structure for table 'header element fields'
27 --
28 --
29 --
30 -- CREATE TABLE 'header element fields'
31 --
32 CREATE TABLE `header element fields` (
33   `SpectraSearchID` int(4) NOT NULL DEFAULT '0',
34   `Name` varchar(100) CHARACTER SET utf8 COLLATE utf8_unicode_ci NOT NULL,
35   `Manufacturer` varchar(100) CHARACTER SET utf8 COLLATE utf8_unicode_ci DEFAULT NULL,
36   `CatalogNumber` varchar(100) CHARACTER SET utf8 COLLATE utf8_unicode_ci DEFAULT NULL,
37   `Description` varchar(100) CHARACTER SET utf8 COLLATE utf8_unicode_ci DEFAULT NULL,
38   `DocumentCreator` varchar(100) CHARACTER SET utf8 COLLATE utf8_unicode_ci DEFAULT NULL,
39   `UniqueIdentifier` varchar(100) CHARACTER SET utf8 COLLATE utf8_unicode_ci DEFAULT NULL,
40   `MeasurementEquipment` varchar(100) CHARACTER SET utf8 COLLATE utf8_unicode_ci DEFAULT NULL,
41   `Laboratory` varchar(100) CHARACTER SET utf8 COLLATE utf8_unicode_ci DEFAULT NULL,
42   `ReportNumber` varchar(100) CHARACTER SET utf8 COLLATE utf8_unicode_ci DEFAULT NULL,
43   `ReportDate` timestamp NULL DEFAULT NULL,
44   `Comments` varchar(100) CHARACTER SET utf8 COLLATE utf8_unicode_ci DEFAULT NULL,
45   `Application` varchar(100) CHARACTER SET utf8 COLLATE utf8_unicode_ci NOT NULL,
46   `Type` varchar(100) CHARACTER SET utf8 COLLATE utf8_unicode_ci NOT NULL,
47   `Technology` varchar(100) CHARACTER SET utf8 COLLATE utf8_unicode_ci NOT NULL
48 ) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8_unicode_ci;
49
50 --
51 -- Dumping data for table 'header element fields'
52 --
53
54 INSERT INTO `header element fields` (`SpectraSearchID`, `Name`, `Manufacturer`, `CatalogNumber`, `Description`, `DocumentCreator`, `UniqueIdentifier`, `MeasurementEquipment`, `Laboratory`, `ReportNumber`, `ReportDate`, `Comments`, `Application`, `Type`, `Technology`)
55 VALUES
56 (0, '43W Equivalent E260 Soft White', 'CIE', NULL, 'Cree E260 LED bulbs feature beautiful light that provides exceptional color quality (90+ CRI) - making the colors in your home appear vibrant, rich and natural. Designed to last more than 22-year (25,000-hour) life. Long life. Decorative. Compact. Soft. White. Soft White decorative light bulbs provide warm, pleasing light. Use the decorative bell-rim shape in chandeliers, pendants, sconces and more to bring out the beauty of the future.', 'N', '43W, Bright White Spiral CFL', 'Globe', NULL, '23 Watt compact fluorescent lamp. Bright white color and high color rendering means a brighter, more colorful space.', NULL, NULL, NULL, NULL, NULL, NULL, 'Spiral', 'Lamp', 'Fluorescent'),
57 ('Lightbulb, Architectural, 100 Watt', 'Phillips (Signify)', NULL, 'Provides safety and security in residential and commercial applications in locations such as entrances, over garages, wall signs, and locations along perimeters and pathways.', NULL, NULL, NULL, NULL, NULL, NULL, NULL, NULL, NULL, NULL, NULL, NULL, 'LED'),
58 (4, 'Cool White 32W LED T2 40" Tube', 'General Electric', NULL, NULL, NULL, NULL, NULL, NULL, NULL, NULL, NULL, 'Linear Fixture', 'Lamp', 'LED'),
59 (4, 'Daylight R9 Light Therapy Lamp', 'Light Technologies', NULL, 'Daylight R9 is a small combination task light - therapy light used for the treatment for Seasonal Affective Disorder (SAD).', NULL, NULL, NULL, NULL, NULL, NULL, NULL, NULL, NULL, NULL, NULL, 'LED'),
60 (4, 'LED E2622 - 8W', 'LEDtronix', NULL, NULL, NULL, NULL, NULL, NULL, NULL, NULL, NULL, 'Directional', 'Lamp', 'LED'),
61 (1, 'test instrument', 'undefined', 'undefined', 'undefined', 'undefined', 'undefined', 'undefined', 'undefined', 'undefined', 'undefined', NULL, 'undefined', 'A-Type', 'Lamp', 'Incandescent');
62
63
64

```

with a worth of 181 lines. You will copy all of it and navigate back to the PHPMyAdmin page to paste it in the command place:



Then you will press “Go”. It will showcase a loading icon that indicates the process it's doing. Then after that click on the structure tab where you will see the following tables:



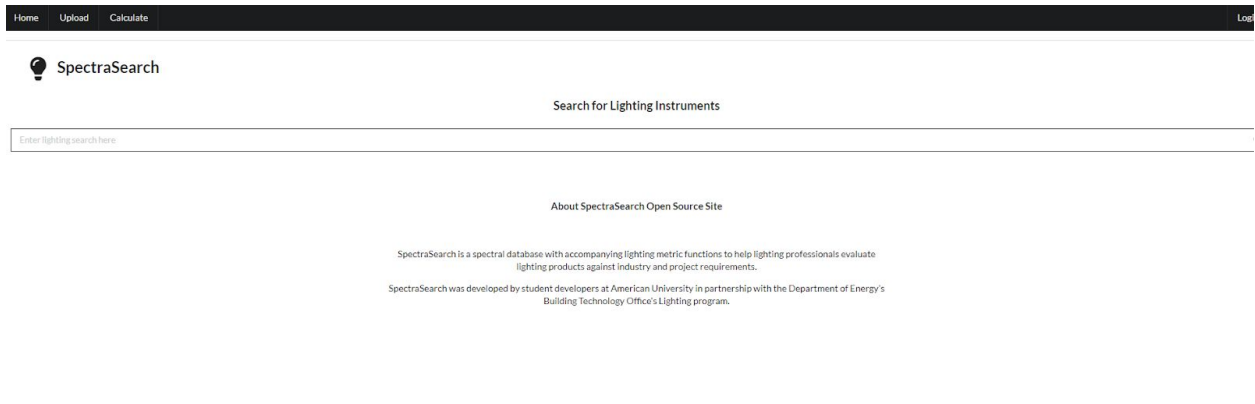
If that is the case, then you successfully finished the preparation for the backend and the database. Now navigate back to the cmd window and type **npm start** and enter:

```
C:\Users\balsw\Desktop\DOE APP\New folder\spectrasearch-webapp>npm start

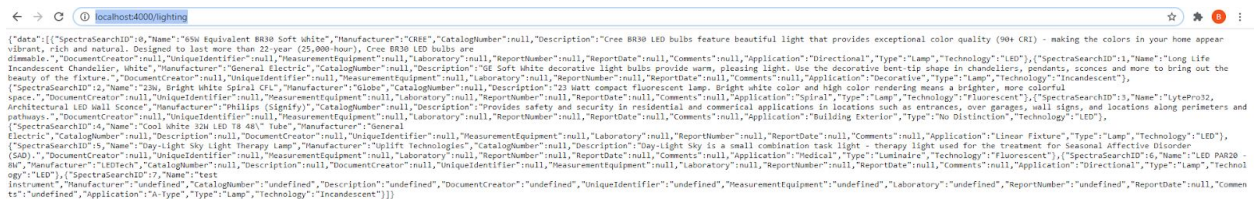
> my-app@0.1.0 start C:\Users\balsw\Desktop\DOE APP\New folder\spectrasearch-webapp
> concurrently "react-scripts start" "node Server.js"

[1] Listening on 4000
[1] connected!
[0] Starting the development server...
[0]
[0] Browserslist: caniuse-lite is outdated. Please run next command `npm update`
```

It will pop up a browser window:



To check if the database is running, type this into your browser <http://localhost:4000/lighting>. You shall see this page that indicate that everything is running:



To login use the following information indicated in the picture:

Login Page

SpectraSearch

Log In

E-mail type this test account

Password the password is "password".

Click login

[DON'T HAVE AN ACCOUNT?](#)

To use the upload feature (still buggy) do the following:

Home **Upload** Calculate Login

successfully, you may access to this page.

Note* Please be sure to Login or upload cannot be processed
User uploading: **test@gmail.com** It will show your login account.

Upload Form

Instrument name: *

Manufacturer:

Description

Application (ex.A-Type): *

Select application ▼

Type: *

Select type ▼

For more information regarding the feature of the web application please follow the older team video. By now everything should be able to run fine. This application is still in development and it should be mentioned that it is in place of crash and error at any time. If such a thing happened then please report that to our point of contact so that we are aware of the issue.