

## **Requirements:**

- MySQL Server
- Node JS, NPM, Nodemon

## **Installing MySQL:**

- Run the following commands on your Ubuntu Terminal
  - ⇒ `sudo apt update`
  - ⇒ `sudo apt install mysql-server`
  - ⇒ `sudo mysql_secure_installation`
    - Press Y, if prompted
    - Enter a password satisfying the given properties

## **Installing NodeJS and NPM:**

- Run the following commands on your Ubuntu Terminal
  - ⇒ `sudo apt update`
  - ⇒ `sudo apt install nodejs`
  - ⇒ `sudo apt install npm`
    - Press Y, if prompted

## **Setting up the database from the given University Database.sql file:**

- Open MySQL server on terminal using the following command
  - ⇒ `sudo mysql -u root`
    - Enter your ubuntu password, if prompted.
- Create an empty database named University\_Database in the following way
  - ⇒ `CREATE DATABASE University_Database`
- Get inside this database using USE
  - ⇒ `USE University_Database`
- Run the following command to load the database in University\_Database
  - ⇒ `source filepath`
  - ⇒ `filepath` → location of University\_Database.sql file

## **Create a User and Granting all privileges to this user:**

- Run the following commands on MySQL command prompt.
  - ⇒ `CREATE USER 'sammy'@'localhost' IDENTIFIED BY 'password';`
    - Replace a name that you want to name this user with 'sammy' and set a password and replace it with 'password'.
  - ⇒ `GRANT ALL PRIVILEGES ON *.* TO 'sammy'@'localhost' WITH GRANT OPTION;`
    - Replace 'sammy' with the username you chosen.

## **Connecting the database and frontend with the help of Node JS:**

Open the folder 'University\_Project' and there will be three files there, namely,

- package.json
- mysql.js
- server.js

Open mysql.js

- In line 6, replace the user from "archit" to the username you decided in last step.
- In line 7, replace the password from "Comemierda@123" to the password you chose in last step.

## **Installing Required Node Modules:**

- Go to terminal and switch to the directory 'University\_Project' in which you found three files earlier.
- Run the following command
  - ⇒ `npm install`
  - ⇒ `npm install -g nodemon`

You will now see new files and folders in the 'University\_Project' folder.

## Running the Web Application:

- Run the following command:  
⇒ `nodemon server.js`

You will see an output similar to this

```
archit@archit-VirtualBox:~/Desktop/University_Project$ nodemon server.js
[nodemon] 2.0.15
[nodemon] to restart at any time, enter `rs`
[nodemon] watching path(s): *.*
[nodemon] watching extensions: js,mjs,json
[nodemon] starting `node server.js`
Creating mysql connection...
Running server on port: 3000
█
```

- Open 'Firefox' and type "localhost:3000" in url box and press enter.
- Web Application can be seen, you will be at home page and can navigate to other pages through links on home page.