Installation - Events4U

This guide will walk you through the installation process for setting up the “Events4U” project using MySQL as the database, Node.js with Express.js as the API server, and Angular as the frontend framework running on NGINX web server.  
Before you begin update your server:  
***sudo apt update  
sudo apt upgrade***

# Step 1: Install Node.js and npm

1. Install Node.js and npm using the package manager:  
   ***sudo apt install nodejs npm***
2. Verify the installation:  
   ***node -v  
   npm -v***

# Step 2: Install MySQL

1. Install MySQL server using the package manager:  
   ***sudo apt install mysql-server***
2. Start the MySQL service:  
   ***sudo systemctl start mysql.service***
3. Since July 2022, further steps are required. Open the MySQL prompt:  
   ***sudo mysql***
4. Change the root user’s authentication method to one that uses a password:  
   ***ALTER USER 'root'@'localhost' IDENTIFIED WITH mysql\_native\_password BY 'your\_password';***
5. Now you can exit the MySQL prompt:  
   ***exit***
6. Run the security script:  
   ***sudo mysql\_secure\_installation***
7. You can activate the “VALIDATE PASSWORD COMPONENT” if you choose so, in my case it is active.
8. Now you can change the root password or keep it, either way remember the password.
9. Then you can remove anonymous users, which I recommend.
10. The next option is to disallow remote login of the root user.
11. Then remove the test database.
12. Finally reload the privileges tables.

# Step 3: Initialize the database

1. You can run both of the “sql” files in your editor like MySQL Workbench.

# Step 4: Configure the files.

1. Now connect to your server and upload the API folder and the “dist” folder from the frontend.
2. To run the API we will use the PM2 package:  
   ***npm i pm2***
3. In the the API folder you will need to install following packages:

* ***npm i express***
* ***npm i dotenv***
* ***npm i mysql2***
* ***npm i cors***
* ***npm i multer***
* ***npm i pdfkit***
* ***npm i node-cron***
* ***npm i nodemailer***
* ***npm i jsonwebtoken***

***Alternatively, you can install everything with just:***

* ***npm i***

1. Then you need to make a “.env” file and fill in you database information in this format:  
   ***DB\_HOST ='{IP ADRESS} '***

***DB\_PORT = '3306'***

***DB\_USERNAME = '{USERNAME }'***

***DB\_PASSWORD = '{PASSWORD }'***

***DB\_NAME = 'Events4u'***

***DB\_NAME\_AUDDIT = 'Events4uAuditLogs'***

1. To run the frontend we will use NGINX:  
   ***sudo apt install nginx***
2. Now you must configure the webserver to serve your frontend. To do so you need to change the config files:

* ***sudo vim /etc/nginx/nginx.conf***

1. In the “http” section add this config, you can change the port, you also need to replace the “{user}” with the name of the user where the frontend folder is located:  
   ***server {*** ***listen 8080;  
    listen [::]:8080;  
    server\_name \_;  
    location / {  
    root /home/{user}/dist/events4u/browser;  
    }  
   }***
2. Now that the webserver can access the files you have to change the rights to your user folder, again you need to replace the “{user}” with the name of the user:  
   ***sudo chmod 755 /home/{user}***

# Step 5: Run everything

1. First of all you will make the API run, for that you go to the directory of the API and run following command:  
   ***pm2 start server.js***
2. Then you run or restart the NGINX with the command(s):  
   ***sudo systemctl start nginx  
   OR  
   sudo systemctl restart nginx***