**System Deployment Guide**

**Explore It Platform**

*Created by JAVAlimos*

Requirements

* Full access to the project repository on Github.
* A server with Ubuntu

Deployment

1. Access to the server via SSH
2. Install MySQL using the following steps by running the command apt install mysql-server
3. Clone the repository on /var/www/exploreit/ directory
4. Create a virtual environment on /home/virtuals/exploreit/ directory using the command python3 -m venv exploreit
5. Activate the virtual environment using source /home/virtuals/exploreit/bi/activate
6. Go to the project folder and install the requirements.txt running the command pip install -r requirements.txt
7. Edit settings.py located on exploreit/exploreit\_app/settings.py changing the following variables:

* STATIC\_ROOT = os.path.join(BASE\_DIR, 'static')
* ALLOWED\_HOSTS = ['your server IP address']

1. Install MySQL Database Connector:

* sudo apt install python3-dev
* sudo apt install python3-dev libmysqlclient-dev default-libmysqlclient-dev
* pip install mysqlclient

1. Create the Database:

* sudo mysql -u root
* CREATE DATABASE exploreit;
* CREATE USER 'djangouser'@'%' IDENTIFIED WITH mysql\_native\_password BY 'password';
* GRANT ALL ON blog\_data.\* TO 'djangouser'@'%';
* FLUSH PRIVILEGES;

1. Add the MySQL Database Connection to the App

* On settings.py:

DATABASES = {

'default': {

'ENGINE': 'django.db.backends.mysql',

'OPTIONS': {

'read\_default\_file': '/etc/mysql/my.cnf',

},

}

}

* sudo nano /etc/mysql/my.cnf:

...

[client]

database = blog\_data

user = djangouser

password = your\_actual\_password

default-character-set = utf8

* sudo systemctl daemon-reload
* sudo systemctl restart mysql
* python manage.py makemigrations
* python manage.py createsuperuser
* python manage.py collectstatic
* sudo ufw allow 8000
* sudo nano /etc/systemd/system/gunicorn.service

[Unit]

Description=gunicorn daemon

After=network.target

[Service]

User=sammy

Group=www-data

WorkingDirectory=/home/sammy/myproject

ExecStart=/home/sammy/myproject/myprojectenv/bin/gunicorn --access-logfile - --workers 3 --bind unix:/home/sammy/myproject/myproject.sock myproject.wsgi:application

[Install]

WantedBy=multi-user.target

* sudo systemctl start gunicorn
* sudo systemctl enable gunicorn
* sudo systemctl daemon-reload
* sudo systemctl restart gunicorn

1. Configure Nginx to Proxy Pass to Gunicorn

* sudo nano /etc/nginx/sites-available/exploreit

server {

listen 80;

server\_name server\_domain\_or\_IP;

location = /favicon.ico { access\_log off; log\_not\_found off; }

location /static/ {

root /var/www/exploreit;

}

location / {

include proxy\_params;

proxy\_pass http://unix:/var/www/exploreit/exploreit.sock;

}

}

* sudo ln -s /etc/nginx/sites-available/myproject /etc/nginx/sites-enabled
* sudo nginx -t
* sudo systemctl restart nginx
* sudo ufw delete allow 8000
* sudo ufw allow 'Nginx Full'

For platform updates:

1. run cd /var/www/exploreit
2. run git pull
3. Enter credentials
4. Run service nginx restart
5. Apply migrations if necessary