**Ansible Project To Monitor VMs Health**

**Instance Setup**

Name: Server

Type: Ubuntu

Instance Type: t2.medium

Key Pair: Roopam(create)

SG: 22,587, 80, 443, 3000-9000,8000

Storage: 25

**RUN APP IN LOCAL AND BUILD**

Connect the instance

$sudo apt update

$git clone https://github.com/roopam-joshi-au26/Gen-AI.git

Go inside- cd/GenAI-Assistant

To create a virtual env so that other app will not installed the dependencies

1. **Install Python & pip (if not already)**

sudo apt update

sudo apt install -y python3 python3-pip python3-venv

Create and activate the virtual env inside backend file

1. **Create a Virtual Environment (Optional but Recommended)**

cd ~/python-demoapp/src

cd backend/

python3 -m venv venv

source venv/bin/activate

1. **Install Python & pip (if not already)**

Open frontend in another session and open frontend and install nodejs

cd frontend/

curl -o- https://raw.githubusercontent.com/nvm-sh/nvm/v0.40.3/install.sh | bash

install the given commands

\. "$HOME/.nvm/nvm.sh"

Create two environment variable

1. Openapi key
2. url of backend for frontend

open account in API keys- OpenAI API

API keys and create new secret key

OPENAI\_API\_KEY= [paste the key]

In backend session

vi .env

OPENAI\_API\_KEY= [paste the key]

In frontend session

vi .env

NEXT\_PUBLIC\_API\_BASE\_URL=http://Publicip:8000

Start the backend

pip install -r requirements.txt

uvicorn main:app --reload --host 0.0.0.0 --port 8000

In frontend session

npm install

npm run dev

publicip:3000

**DOCKERIZE THE PROJECT**

Deactivate the backend env- $deactivate

cd GenAI-Assistant

1.install docker

2.install docker compose

Enable ubuntu user to run docker command

$sudo usermod -aG docker ubuntu

$newgrp docker

$sudo curl -SL https://github.com/docker/compose/releases/download/v2.39.2/docker-compose-linux-x86\_64 -o /usr/local/bin/docker-compose

$chmod +x /usr/local/bin/docker-compose

Docker-compose up

In frontend session

cd frontend/

npm run build

publicip:3000