CI/CD Pipeline for Flask App using Terraform, Ansible & GitHub Actions in AWS

Amazon S3

Stores the state file to the S3 Bucket

HashiCorp Terraform

Create VPC / Security Group, Provision EC2 Instance

Terraform init
Terraform plan
Terraform apply

Developers push the code to Shared GitHub Repo

GitHub triggers the GitHub Actions workflow

Developers

GitHub

Github Actions runs the Ansilbe playbook

VPC

us-east-1

Security group

EC2 instance

Gunicorn Service

NGINX

Reverse Proxy

http://<EC2_PUBLIC_IP>

User accessing

Browser

Install Python, pip, Virtual env

Install & Configure NGINX

Install Gunicorn+ Start service

Ansible