DevOps Project

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Question: Create a complete DevOps CI/CD Pipeline with Jenkins for a Use Case (different from the Calculator application) by using GIT, Maven, Puppet/Ansible/Terraform, Docker, JUnit, Graphite, and Grafana. You can add more tools if you want.

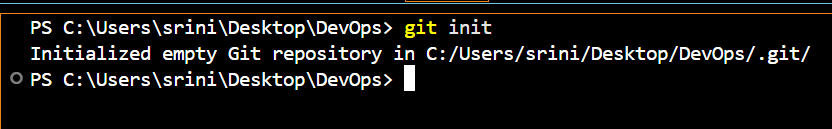
DevOps Tools Used:

* Git
* Jenkins
* Pip (package manager)
* Venv (Virtual Environment)
* Docker (Containerisation)
* Graphite
* Prometheus (Metrics)
* Loki (Logs)
* Pytest (Testing Framework)
* Ansible
* Terraform

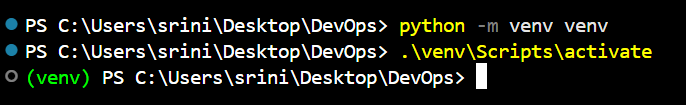
Tech Stack:

* FastAPI (Backend)

1. Initialising a git repository

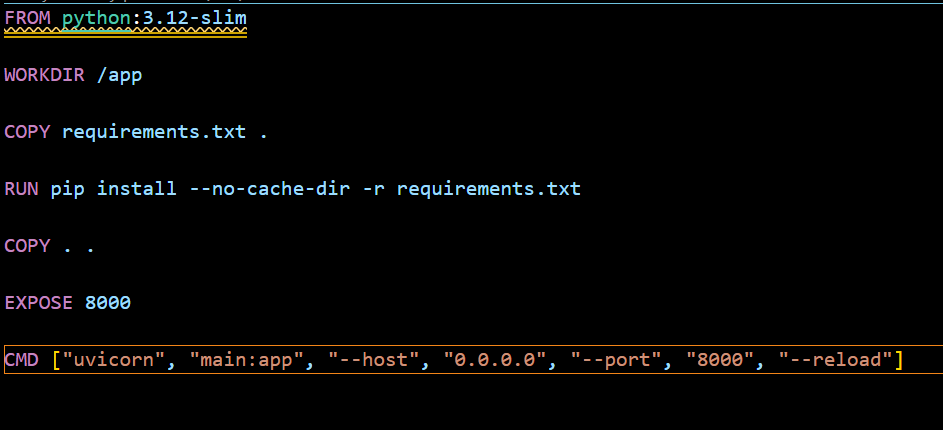


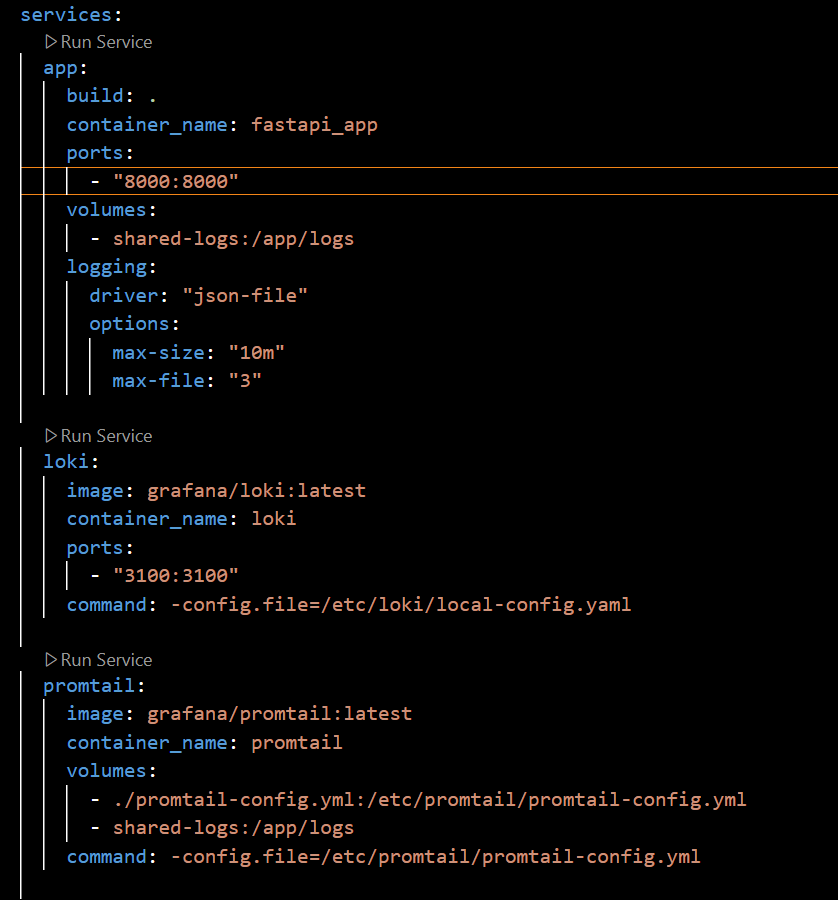
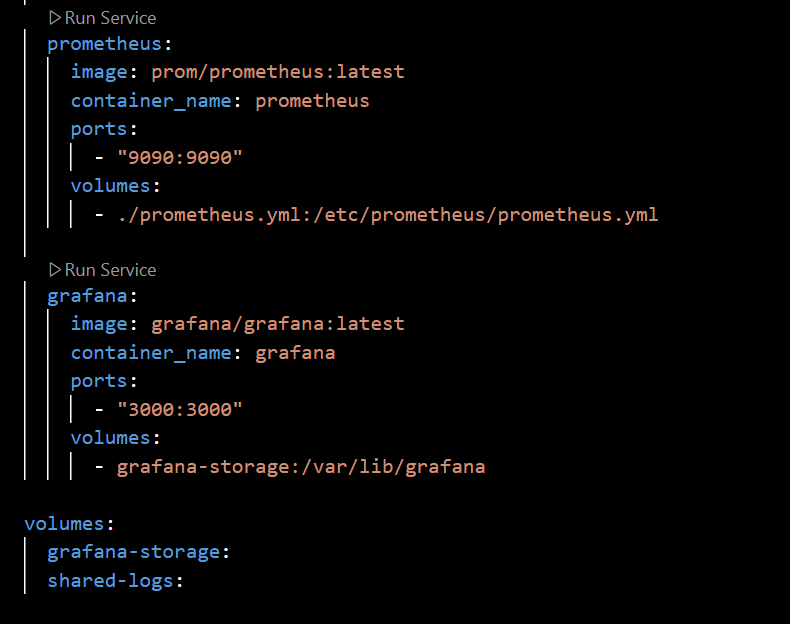
1. Creating a Virtual Environment



1. Setting up Loki, Prometheus, Grafana for the FastAPI App using Docker and Docker Compose

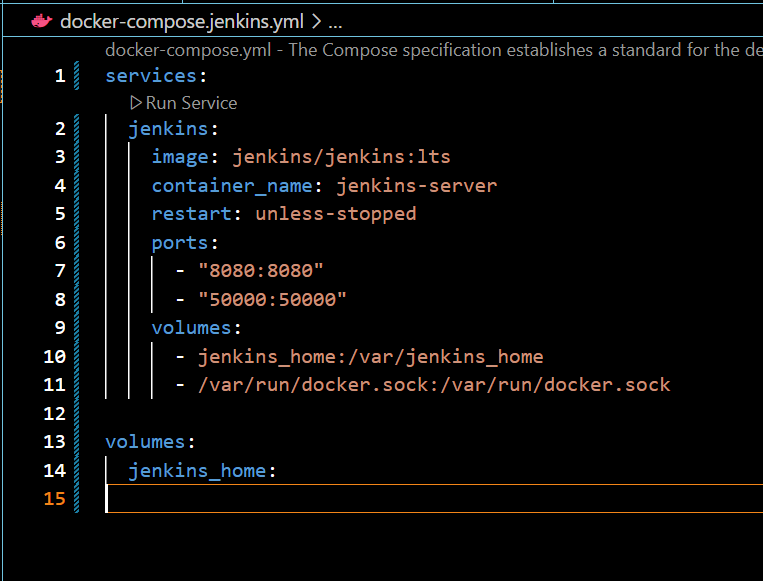
Dockerfile

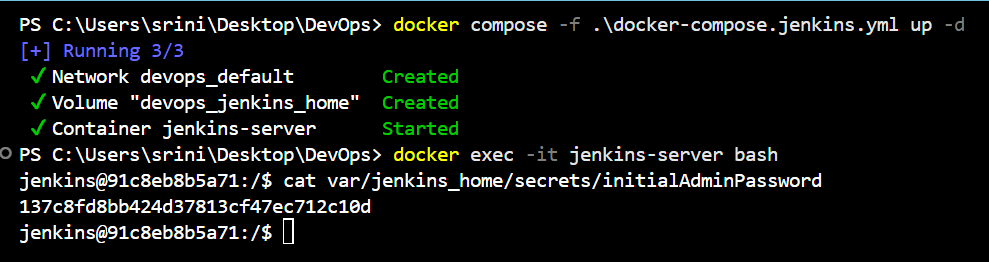


docker-compose.monitoring.yml 

1. Jenkins

docker-compose.jenkins.yml





Navigating to localhost:8080

