

DevOps Tasks (Task-wise)

Project Overview

Is project ka maqsad ek modern DevOps environment banana hai jisme .NET microservices, Angular frontend, Docker, Kubernetes aur CI/CD pipeline shamil ho.

Task 1: Environment Setup

- Git install karein
- .NET SDK install karein
- Node.js & Angular CLI install karein
- Docker Desktop install karein
- Kubernetes (Minikube) setup karein

Task 2: .NET Microservice 1 (Data Entry API)

- Simple ASP.NET Core Web API banayein
- POST / GET endpoints banayein
- Sample in-memory data use karein

Task 3: .NET Microservice 2

- Second microservice banayein (example: Audit / Logging)
- APIs ko alag port pe run karein

Task 4: Angular Frontend

- Data entry form banayein
- Backend API ko call karein
- Data list show karein

Task 5: Dockerization

- Har microservice ke liye Dockerfile banayein
- Angular app ko Dockerize karein
- Docker images build karein

Task 6: Kubernetes Deployment

- Deployment.yaml & Service.yaml banayein
- Pods & Services verify karein

Task 7: CI/CD Pipeline

- GitHub Actions pipeline banayein
- Auto build, test & deploy configure karein

Final Goal

Code push karte hi pipeline automatically Docker build kare aur Kubernetes cluster par deploy ho jaye.