3 Tier - Application

Monolithic Application

- Frontend
- Backend
- Database

Frontend - https://github.com/devopsinsiders/ReactTodoUIMonolith

Backend - https://github.com/devopsinsiders/PyTodoBackendMonolith

Microservice Application

- Frontend
- Backend Microservices
- Database

Backend Microservices:
- get-tasks api
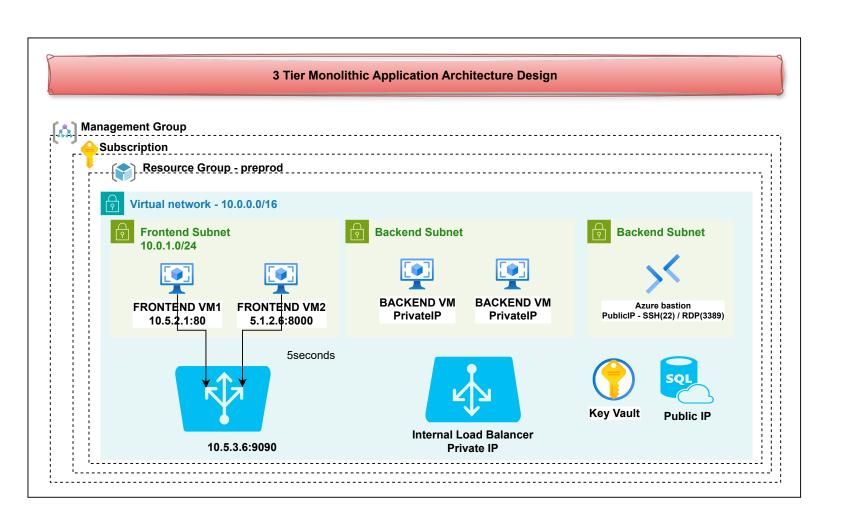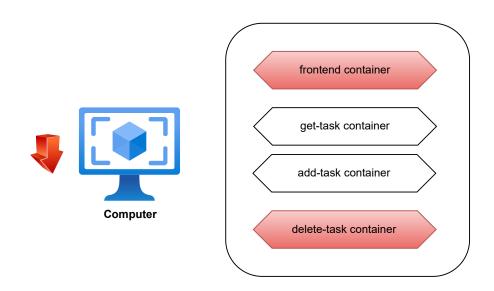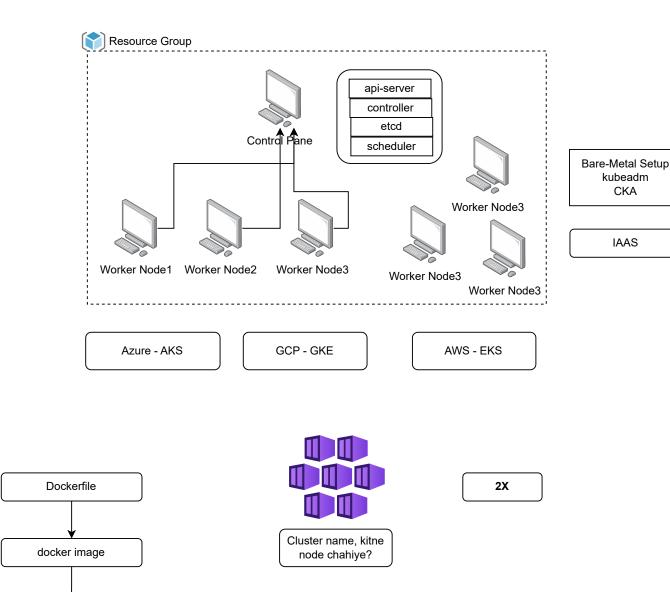- add-task api
- delete-task api

https://github.com/devopsinsiders/MicroTodoUI
https://github.com/devopsinsiders/DeleteTaskTodoMicroservice
https://github.com/devopsinsiders/AddTaskTodoMicroservice
https://github.com/devopsinsiders/GetTasksTodoMicroservice

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3 Tier Monolithic Application Architecture Design

Management Group

Subscription

Resource Group - preprod

Virtual network - 10.0.0.0/16

Frontend Subnet 10.0.1.0/24
- FRONTEND VM1 10.5.2.1:80
- FRONTEND VM2 5.1.2.6:8000

Backend Subnet
- BACKEND VM PrivateIP
- BACKEND VM PrivateIP

Backend Subnet
- Azure bastion PublicIP - SSH(22) / RDP(3389)

5seconds

10.5.3.6:9090

Internal Load Balancer Private IP

Key Vault

Public IP

Computer

- frontend container
- get-task container
- add-task container
- delete-task container

Resource Group

Control Pane
- api-server
- controller
- etcd
- scheduler

- Worker Node1
- Worker Node2
- Worker Node3
- Worker Node3
- Worker Node3
- Worker Node3

Bare-Metal Setup kubeadm CKA

IAAS

- Azure - AKS
- GCP - GKE
- AWS - EKS

- Dockerfile
- docker image
- Container Registry - DockerHub - Public Azure Container Registry - Private

2X

Cluster name, kitne node chahiye?

Kubernetes saal me 2 release

1(Major Version).28(Minor Version).21(Patch)