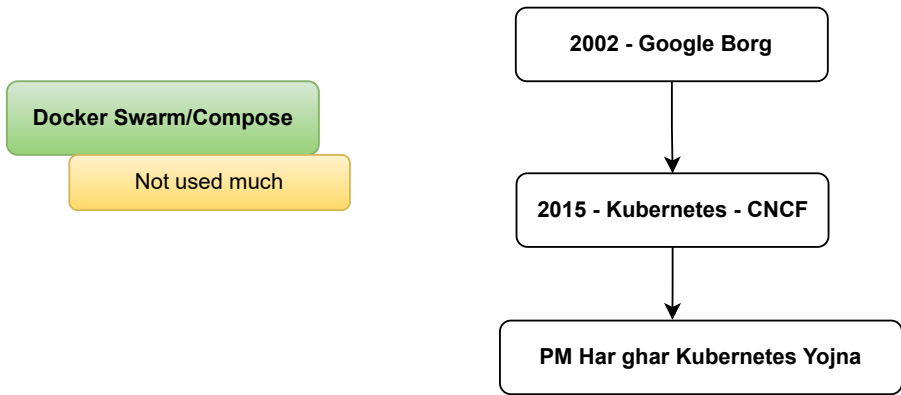
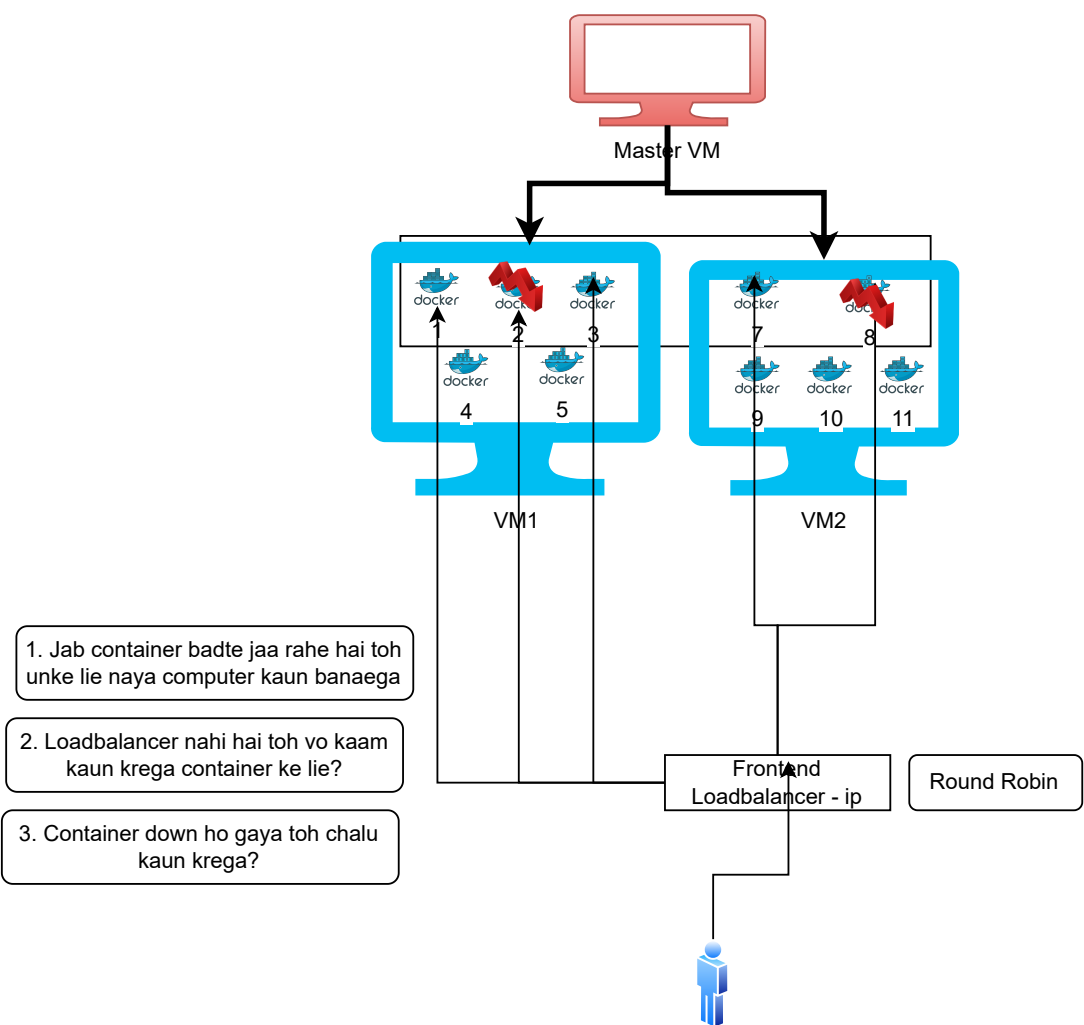


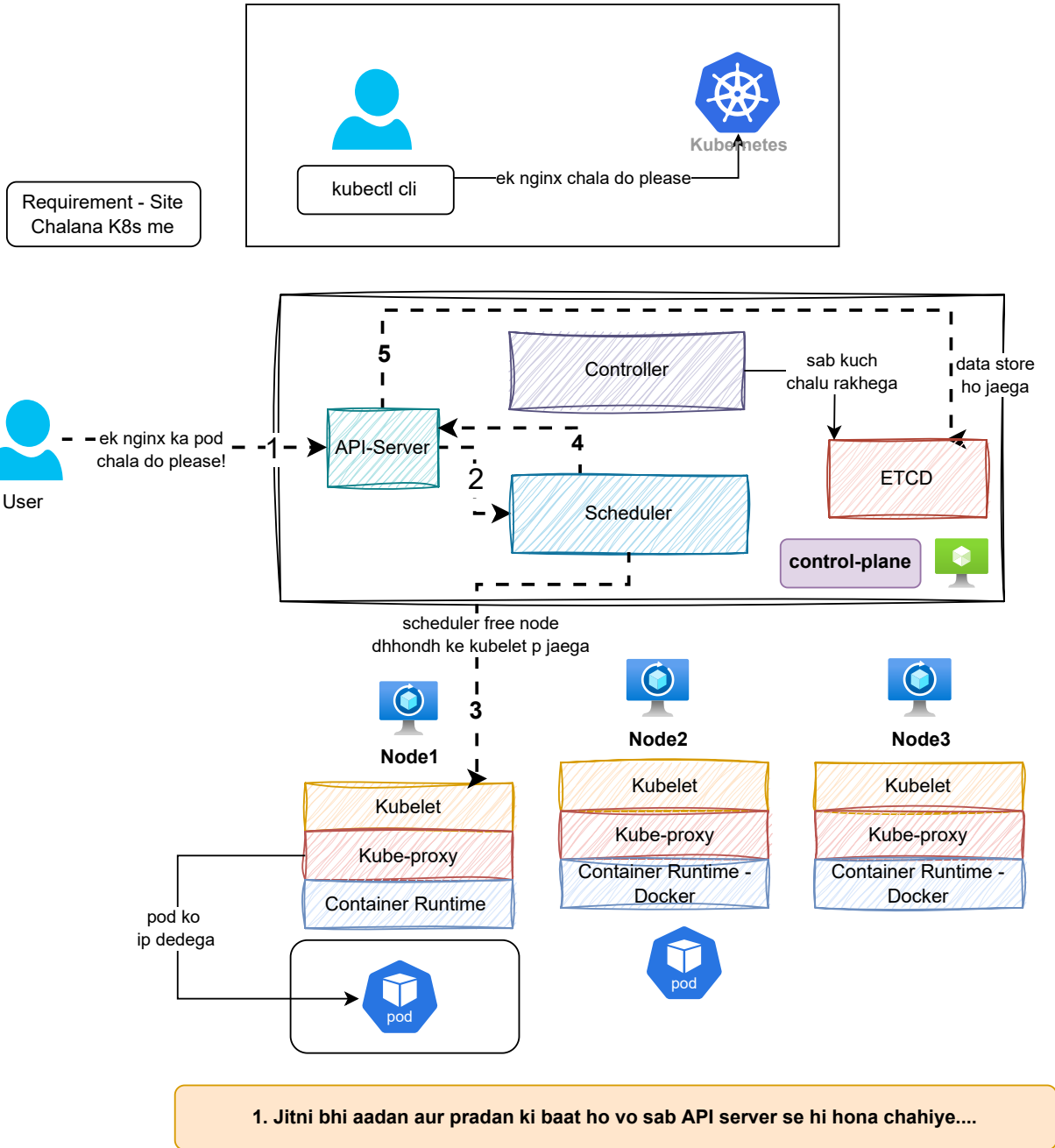
- Problems:
- bahut sare Containers ko manage kaun karega
- Autoscaling kaise hoga?
- Loadbalancing kaise hoga?
- Kaun inka memory cpu ka khayal rakhega?



Kubernetes Architecture Components
1. API Server
2. Scheduler
3. Controller
4. ETCD Database
5. Kube-Proxy - Worker
6. Kubelet - Worker
7. Container Runtime - Worker



Container Registries	Kubernetes Syllabus	
	Introduction	Why? Kyu? Kislie?
	Architecture	
	Core Concepts	
Upgrading K8s Cluster	Container	Pod
	NameSpaces	
Kubernetes Dashboard	Networking	
	Cluster Networking	Services - ClusterIP, NodePort, LoadBalancer
Kubernetes on Azure	Network Policies	
	Deployment	
	Replicat Set	Deployment
	Rollout/Rollback	
	Horizontal and Vertical Scaling	
	Storage in Kubernetes	
	Persistent Volumes	Persistent Volumes Claim
	Storage Class	
	Kubernetes Ingress	
	Ingress Controllers	Ingress Rules
	Kubernetes Security	
	Kube Benchmarking	Secret
	Config Map	Key Vault Integration
	Kubernetes CRD	
	Helm, Service Mesh, Istio	
	Kubernetes Monitoring - Prometheus / Grafana / Grafana loki / Pixie	
	Kubernetes Best Practices	
	Trivy Tool , Pod Afinity, Antiaffinity, Pod Distuption Budgets, certmanager,	
	CI/CD with Kubernetes	
	GitOps - ArgoCD	
	Kubernetns with GenAI - k8s GPT	



- Hardware Requirements
- 3 VM - 1 VM me control Pane, 2 VM me Worker
- Passwordless communication
- sab install karna pdega... api-server, controller, scheduler sab...

Ye sab preshani khatm.... cloud se

Azure Kubernetes Cluster

Google Kubernetes Engine

Elastic Kubernetes Service

