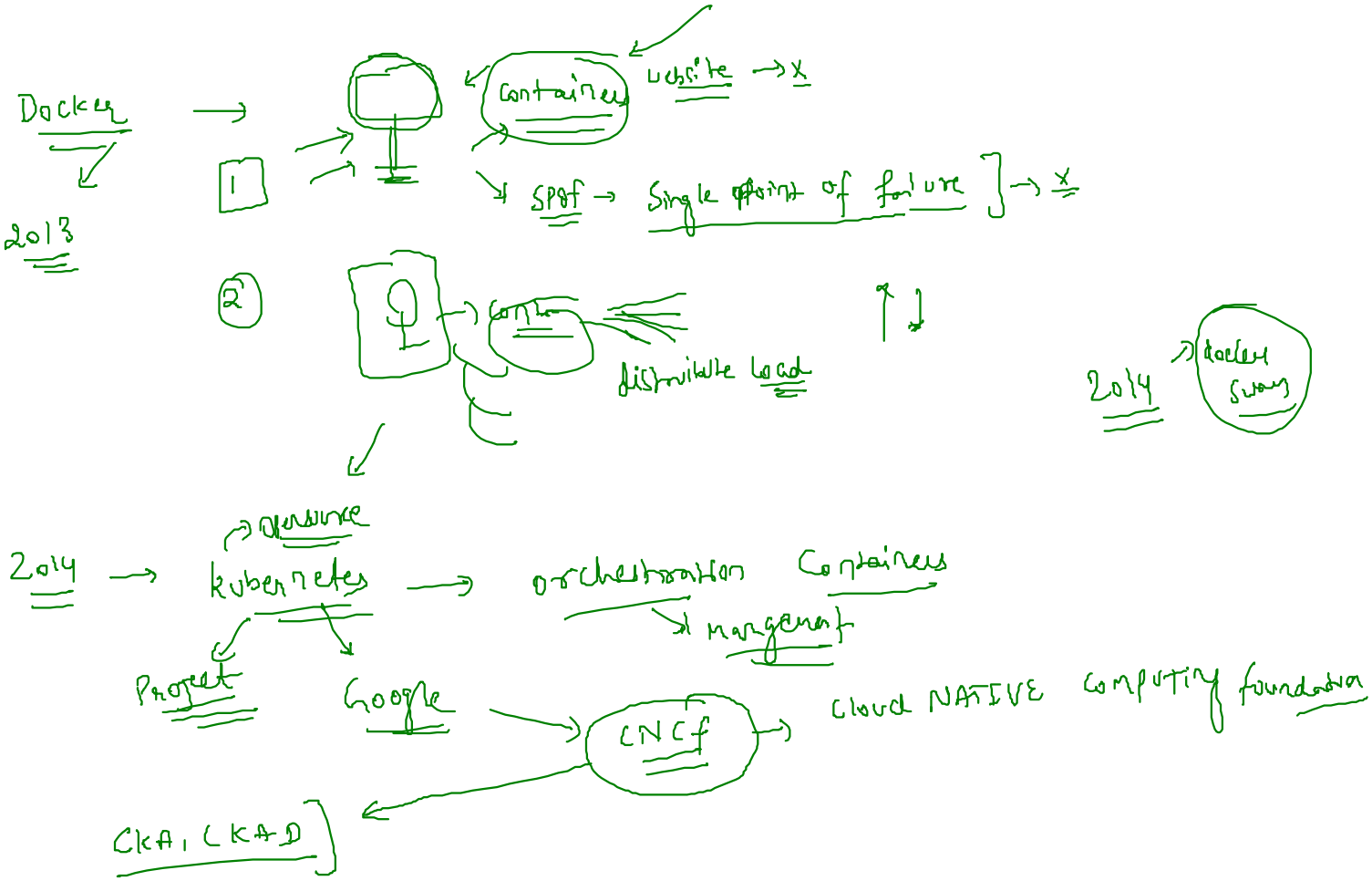
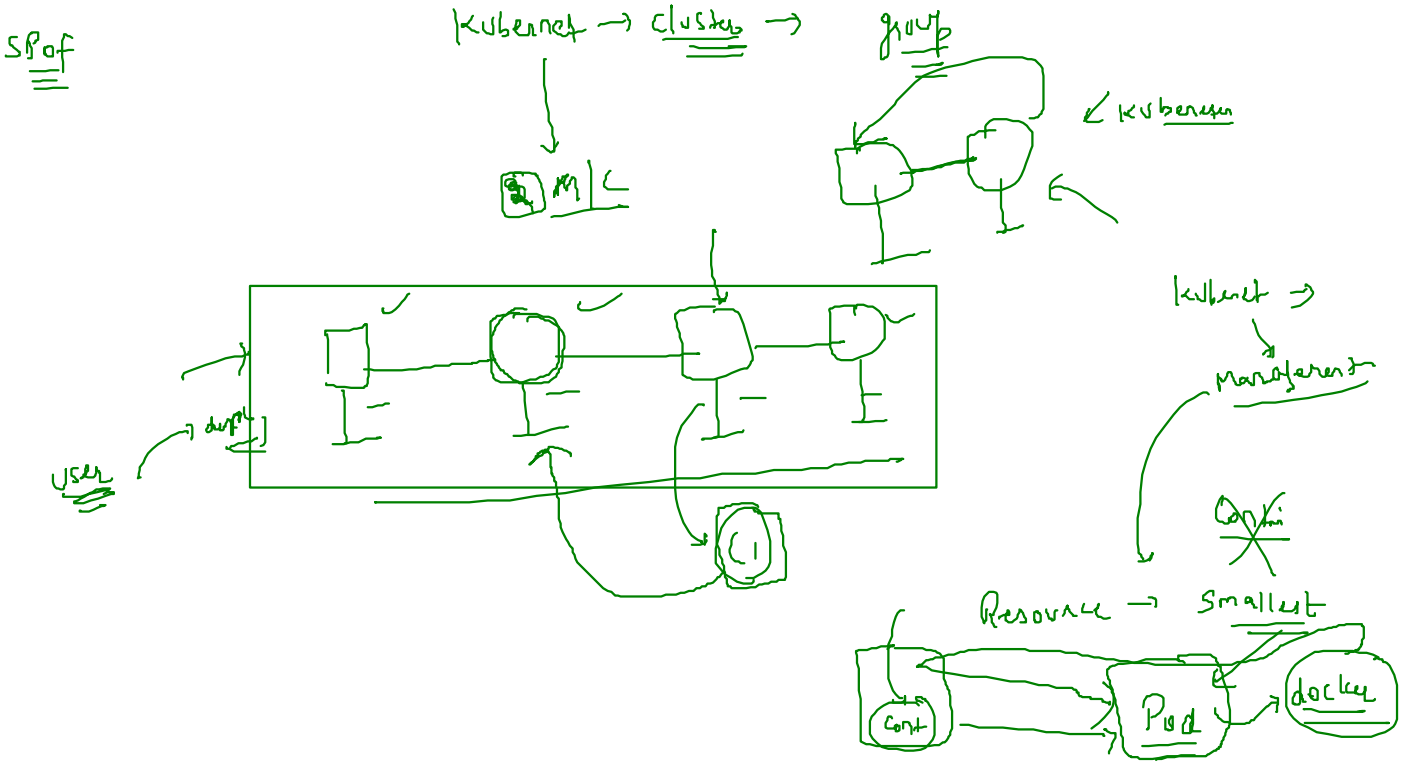
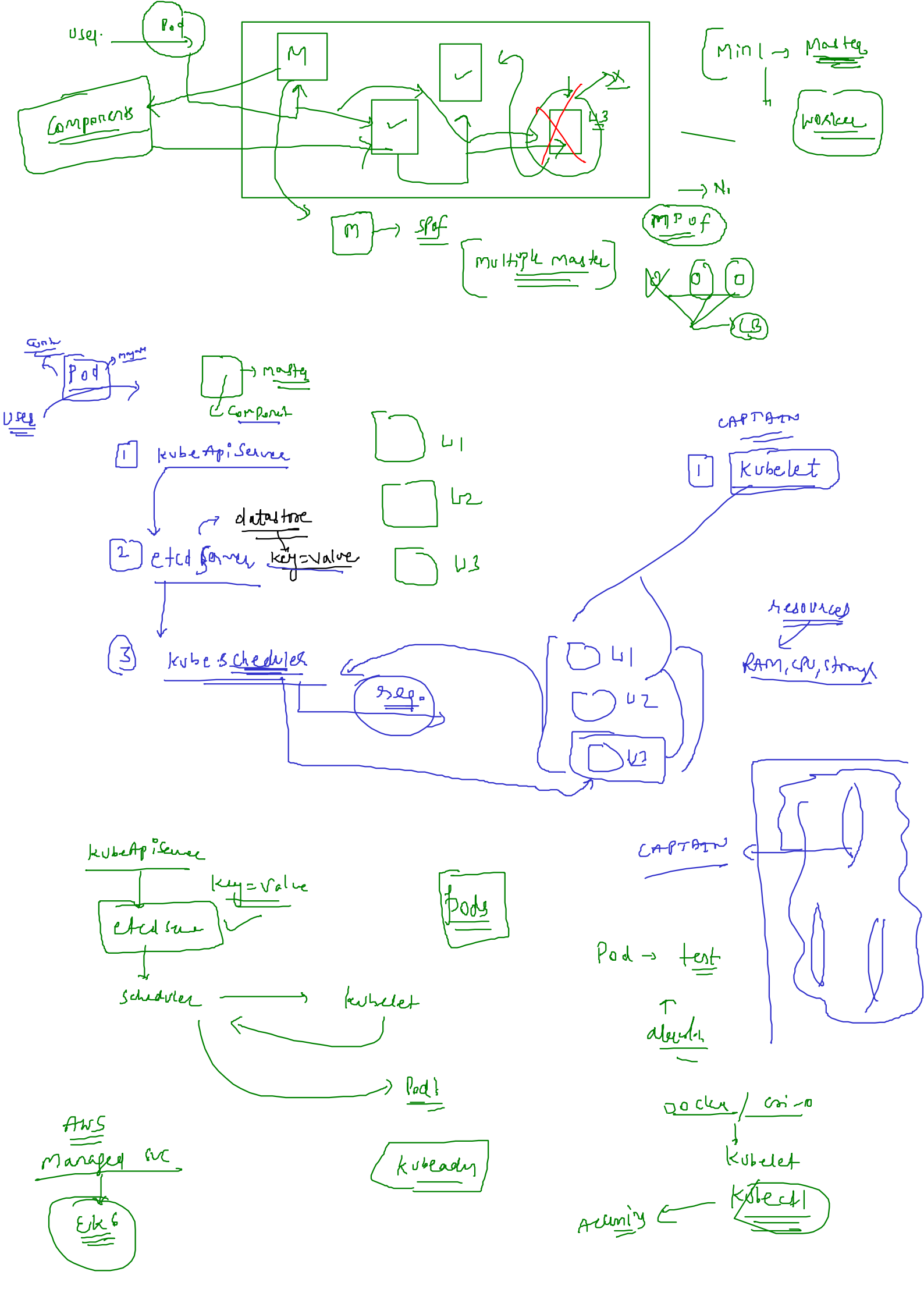
Day 5 - 21st June 2024

Todays Agenda :-

1. Kubernetes
    a. Why it came
    b. advantages
    c. Architcture
    d. Creating Cluster --- EKS -- Elastic Kubernetes Service
    e. Access the Cluster
    f. Resources
        i. Namespace
        ii. PODS
        iii. Deployments
        iv. Services







User
Pod
Components
M
W3
Mini → Master
worker
M → SPof
multiple master
→ N1
MPof
LB
Pod
master
Component
User
1 kubeApiServer
2 etcd server
datastore
key=value
3 kube scheduler
req.
W1
W2
W3
CAPTAIN
1 Kubelet
resources
RAM, CPU, storage
kubeApiServer
key=value
etcd server
scheduler
kubelet
Pod!
Pods
CAPTAIN
Pod → test
alarm
docker / cri-o
kubelet
kubectl
Accuring
AWS
Managed svc
EKS
kubeadm

4 m/c 1m → 3 w ① X

Cred → Clicks

EKS → Create cluster 8/hr

Master → .10$/hr

EC2 → 4

M → 32GB → ~~40 GB~~ 25-30 rs/hr = 1 hr Worker

EKS → Add worker m/c → NodeGroup - 1 - 2 - 3

AWS cure → access

uploading image → docker.hub ← Public

Private hub

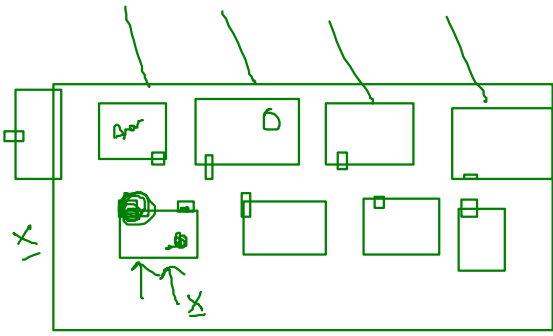
AWS → ECR → Elastic Container Regis

deploy contain

Admin → all admin Access → Limited Acc

① NAMESPACE

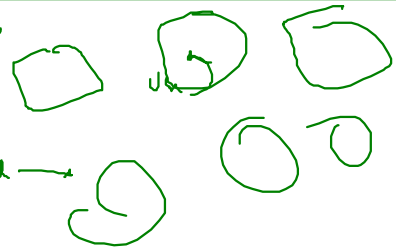
thief → ①



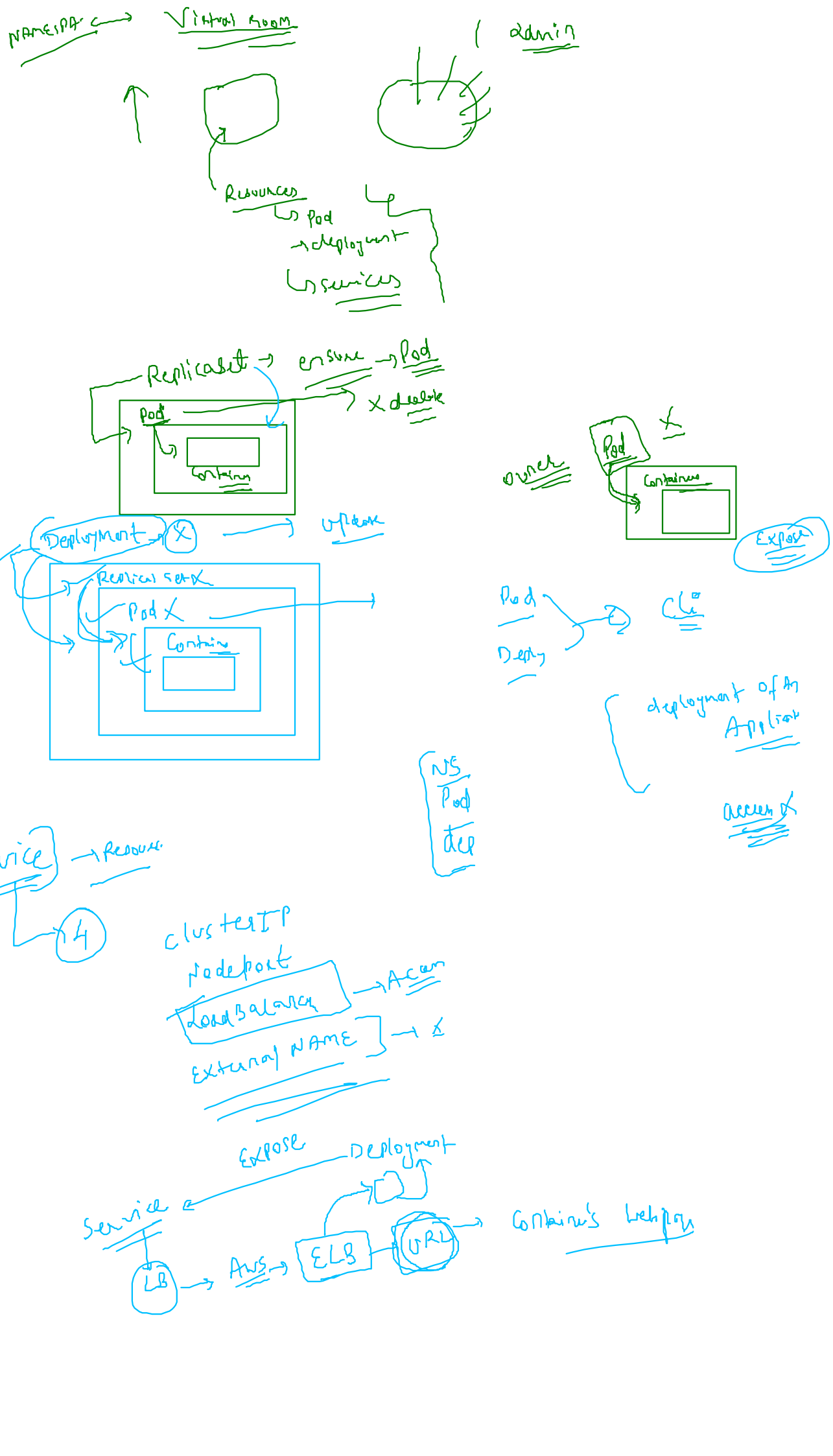
Admin X

kubes → room

User



User →



NAMESPA → Virtual Room

admin

Resources
↳ Pod
→ deployment
↳ services

Replicaset → ensure → Pod
→ X delete

Pod
↳ Container

Deployment → X → update

Replicaset X
Pod X
Container

Pod
Deply → Cli

deployment of an Application

access X

NS
Pod
dep

Service → Resource
→ 4

clusterIP
Nodeport
LoadBalancer → Access
External NAME → X

Expose
Deployment
Service
LB → AWS → ELB → URL → Container's webpage