## Kubernetes Services:-

* providing stable & reliable networking for a set of unreliable pods.

* When pod fails, replaced, etc, it aquires a new IP address. Hence, they are unreliable.

* Service gets its own

| Stable IP address, Stable DNS name & a stable Port |
|---|

* Services use labels & selecters to dynamically select the Pods.

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## Accessing Services inside the cluster:-

If a pod inside the cluster wants to connect to a set of Pods behind a Service (clusterIP),

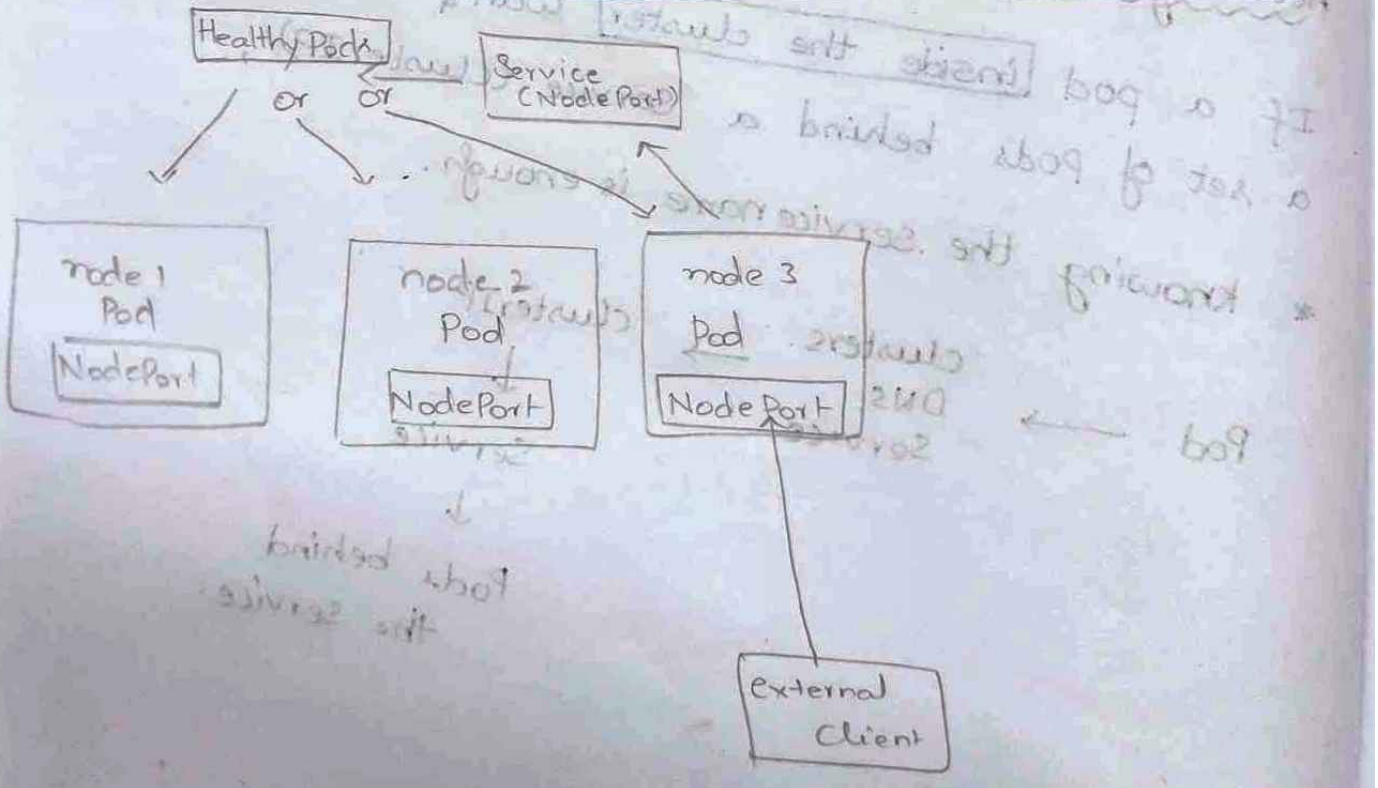
* knowing the service name is enough.

Pod → clusters DNS Service → clusterIP → Service → Pods behind the service.

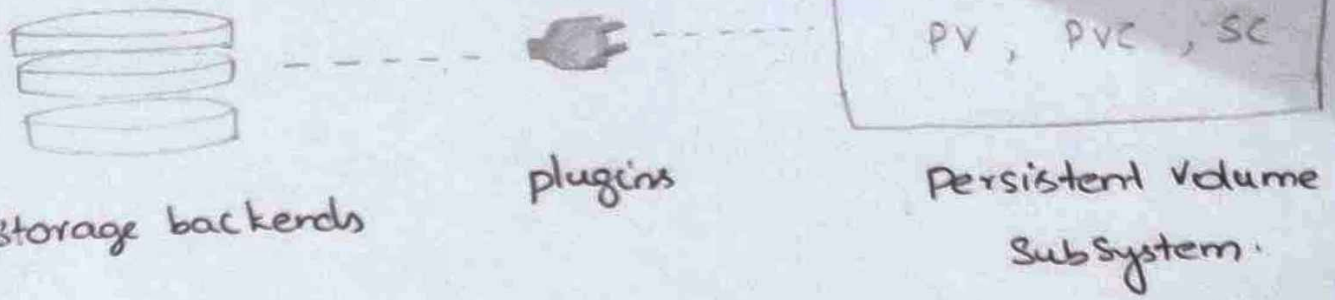
## Accessing Services from outside the cluster:

what if an external client outside the kubernetes cluster wants to access Pods behind a service??

* Special Service called NodePort
  - Builds on top of ClusterIP
    - Assigns a port on every node of cluster called NodePort
      - If the external client hits the NodePort on any of the node in cluster, it is redirected to the service
        - Internal clients can use it as ClusterIP



# kubernetes Storage




storage backends — plugins — Persistent Volume Subsystem.

Remote Storage , Ephemeral Storage , Hostpath ,

Persistent Volume claim

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EmptyDIR & hostpath → Mounting the directory on node inside the Pod.

↳ *created on Node when Pod is created. Persist till the end of Pod cycle...