## Services & Networking (13%)

The recommend time for this section is **15,6 minutes** or less.

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- 1. Create a pod with image nginx called nginx and expose its port 80
- 2. Confirm that ClusterIP has been created. Also check endpoints
- 3. Get service's ClusterIP, create a temp busybox pod and 'hit' that IP with wget
- 4. Convert the ClusterIP to NodePort for the same service and find the NodePort port. Hit service using Node's IP. Delete the service and the pod at the end.
- 5. Create a deployment called foo using image 'dgkanatsios/simpleapp' (a simple server that returns hostname) and 3 replicas. Label it as 'app=foo'. Declare that containers in this pod will accept traffic on port 8080 (do NOT create a service yet)
- 6. Get the pod IPs. Create a temp busybox pod and trying hitting them on port 8080
- 7. Create a service that exposes the deployment on port 6262. Verify its existence, check the endpoints
- 8. Create a temp busybox pod and connect via wget to foo service. Verify that each time there's a different hostname returned. Delete deployment and services to cleanup the cluster
- 9. Create an nginx deployment of 2 replicas, expose it via a ClusterIP service on port 80. Create a NetworkPolicy so that only pods with labels 'access: granted' can access the deployment and apply it