Week #4 – Lab

1. Create an nginx pod, expose it on a service using port 80 and show that the website is working. (1 mark)
2. Create a namespace ***ns1*** and a create a pod that belongs to ns1 (1 mark).
3. Create 3 pods under ns1, and attach two labels to each one of them, according to this table (2 marks)

|  |  |  |
| --- | --- | --- |
|  | Label1 | Label2 |
| pod1 | Frontend | Production |
| pod2 | Frontend | Test |
| Pod3 | Backend | Production |

1. Then: get all pods that have the Production label, get all pods that are in Production and FE. (1 mark)
2. Modify the application in the App folder to show your group members names, build the image, and upload it to your docker hub account. (1 mark)
3. Create a deployment (3 replicas) imperatively from the container and test the pods, replicasets, deployments, services you have in the cluster. (1 mark)
4. Expose the deployment in step 7 imperatively using a service and show that the website is working. (1 mark)
5. Clean up all objects in ***ns1*** (1 mark)
6. Compare K8S to Docker Swarm in terms of differences and similarities (1 mark)