



**LAB 3:**

**Deploying a Circuit Breaking ambassador and a Function-as-a-Service(FaaS)**

**Group 14**

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## **Deliverables:**

### **Part 1:**

**Summarize the problem, the solution, and the requirements for the pattern given in part 1. Which of these requirements can be achieved by the procedures shown in parts 2 and 3?**

The problem for the pattern given in part 1 is that the monitoring services and applications running on the cloud can be difficult because of services needing other services and also differing environments. There are some factors that cause failure for cloud-hosted services including: network bandwidth, availability, performance and network latency.

The solution for the pattern given in part 1 would be that request must be sent to an endpoint of applications that involve result will be analyzed by framework of health verification check and checking apps from the request of an endpoint. Requirements include: validating response code and contents, validating URL returned from DNS lookup, being able to check for the expiration of SSL certificates, setting up security on the endpoints used for monitoring, making sure monitoring agent is functioning properly.

**Kubernetes provides persistent volumes. Why such a feature can be important? How to implement it? Provide an example in which persistent volumes are needed. Configure a YAML file to implement the example. Run it and test the creation of persistent volume and its ability to provide the required functionality within the example.**

The feature mentioned is important as it is a unit for the clusters that either been manually or automatically provisioned utilizing storage classes. These live with clusters called Kubernetes cluster and can remain after a pod to retain data This can be done by provisioning persistent volume claim manifests and store data at the cluster level to be shared by pods.

## **Video Demonstrations:**

### **Part 2:**

<https://drive.google.com/file/d/1ybVfTfrgN7MbmNgSzSAIYEjam9bMGoV6/view?usp=s>

### **Part 3:**

<https://drive.google.com/file/d/1rZQ4BKstJ8HC8e6eDJfQITx8Cn-4wV87/view?usp=sharing>