Auto-scaling for Cloud Microservices

Demo Marking Gide

This document describes the marking scheme for the Reliability project. Note that this marking schema does not include the design part that has 30% of the project grade. This guide will be used by TA to evaluate your demo.

Demo Steps:

Here are the steps that each group needs to demonstrate during the demo session:

1. You will need to show your Swarm cluster and the deployed application microservices. You will use the output of the visualization microservice for this purpose.
2. You will examine a bell shape workload against your application in two scenarios:
    a. Auto-scalability is disabled
        i. Here the response time should change according to the workload.
    b. Auto-scalability is enabled
        i. The response time should stay within the acceptable range despite the changes in the workload
        ii. You need to show that the size of application changes according to workload during this experiment. You can do this by showing the number of containers (ie, replication factors) of each microservice.
3. Visualization
    You need to show three realtime plots during your demo so that the auto-scalability feature of your application can be seen clearly:
        i. The workload plot
        ii. The response time plot
        iii. And a plot showing the size of your application (ie, replication factors of microservices)

Grading:

Out of 20 points for the project, 6 points goes to your design document and the rest, ie 14 points, will go to your demo as followings.

Step	Point
1	2
2(a)	3
2(b)	7
3	2
Sum	14