**CST8912 – Cloud Solution Architecture**

**Graded Lab Activity #11**

**Introduction:**

When you build a cloud infrastructure, you might have anywhere from a small to many resources. Checking the needed parameters for each resource that you have into your cloud environment could become hard. That's where monitoring can help you organize and handle the metrics and checks for your resources. Cloud Monitoring is a Cloud service that collects metrics, events, and metadata from your Cloud environment. Cloud Monitoring automatically detects all the resources that you are running into your cloud infrastructure and provides you rich visualization tools to work with. By using Cloud Monitoring, you can create dashboards with metrics that you need, create checks on critical resources, and create alerts triggered when certain events happen. In this lab, you will work in a cloud environment where you will find an existent Compute Engine instance to work with. You will install the Cloud Monitoring agent and then start practicing with Cloud Monitoring. You will create an uptime check and an alert policy triggered when the uptime check fails. You will also create a chart with the CPU metrics of your Compute Engine instance.

**Purpose of this hands-on lab that can be simulated in any CSP:**

Upon completion of this lab, you will be able to create resources for azure:

1. Create an uptime check for your resources (storage account and a virtual machine with lowest memory option) created in Canada central region /2
2. Define an alert policy that will advise you when certain events happen. /3
3. Handle the Cloud Monitoring dashboard to create a chart that will show you the CPU metrics of the instance /3
4. Use log queries to interact with data /2
5. Create azure data factory in Canada central region /1
6. Create Azure Log Analytics workspace in same region as other resources /1
7. Configure Diagnostic settings for Azure Data Factory /2
8. Create and review a Log Solution for the Azure Data Factory. /2
9. Setup Monitor Alerts for Azure Data Factory /3
10. After demo delete all the resources created in the lab /1

**Video/links for reference for azure:**

<https://www.youtube.com/watch?v=MbyS0a2NCnk>

<https://www.youtube.com/watch?v=1iZxhtxSDu0>

<https://www.youtube.com/watch?v=8gwdB_sCwEw>

**Video/links for reference for AWS:**

<https://www.youtube.com/watch?v=9qKryBb7t6s>

<https://www.youtube.com/watch?v=UxWU9mrSbmA>

**Grading criteria for this lab**:

Create a lab report with all screenshots and submit that in Brightspace