Programming Assignment: ETL - from Smartphone to ObjectStore

You have not submitted. You must earn 1/1 points to pass.

ⓘ It looks like this is your first programming assignment. Learn more   ✕

Deadline   Pass this assignment by October 7, 11:59 PM PDT

Instructions

My submission

Discussions

ETL - from Smartphone to NoSQL Database

This assignment consists of two parts. In the first part you'll use your previously deployed application and your smartphone to create a accelerometer (vibration) sensor data set and use NodeRED to store it in Apache CouchDB (Cloudant). In the 2nd part you'll use ApacheSpark and jupyter to access this data and submit it to the grader.

Part I

1. Using the IBM Cloud Dashboard (bluemix.net) click on the discover-iot-sample app, then click on "Visit App URL" and then you should get the link to your mobile web app, in my case the link looks like this:

http://discover-iot-sample-20180628142843866.mybluemix.net/iot-phone

Dashboard

RESOURCE GROUP **CLOUD FOUNDRY ORG** **CLOUD FOUNDRY SPACE** **LOCATION**

All Resources ⌄ All Organizations ⌄ All Spaces ⌄ All Locations ⌄

Cloud Foundry Applications

Name	Region
discover-iot-sample-20180628142843866	US South
iot-platform-bluemix-starter-20180628140943085	US South

2. Open this URL from your smartphone and select "asdfghjk" as ID and also "asdfghjk" as password. The app will connect to the cloud using MQTT and you will see a counter telling you about the number of messages sent. Shake your phone a bit and then close the app again.

Your device ID:

(X) Disconnected

Enter a unique ID for your device containing only letters and numbers:

asdfghjk|

☐ Prevent this page from creating additional dialogs

| Cancel | OK |

Acceleration

X	Y	Z
0	0	0

4. Again, please use the IBM Cloud Dashboard but now click on iot-platform-bluemix-starter-*, then on View App URL

Dashboard

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5. You should see the Open Source ETL/Flow tool "NodeRED". Please click on the "debug" tab to see your data arriving
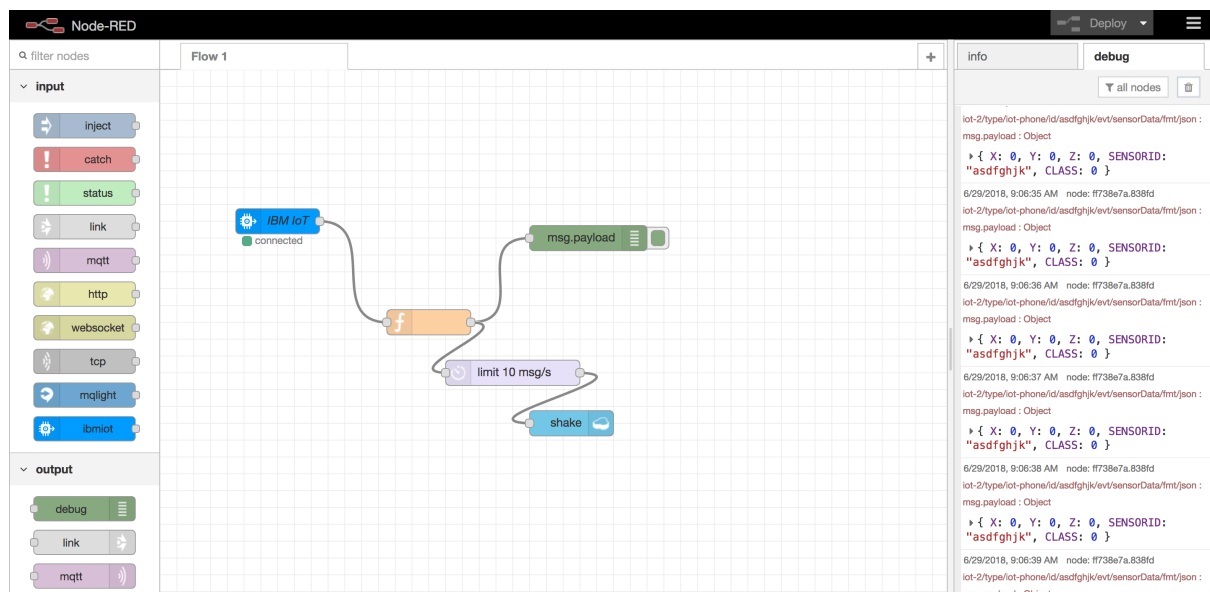
6. Open Watson Studio and log-in on dataplatform.ibm.com

7. Install the Apache Bahir connector to access the database

Just create a new notebook from this link and run all cells, then your Apache Spark service is ready to use (ready to connect to Apache CouchDB using Bahir)

https://raw.githubusercontent.com/romeokienzler/developerWorks/master/coursera/bahir_setup.ipynb

8. Import the following Notebook into Watson Studio and follow the instructions in the Notebook – this will just load the data you've created, write the data frame to a parquet file and submit it to the grader.

https://raw.githubusercontent.com/IBM/coursera/master/coursera_ml/AssignmentML1.ipynb

You can also get a preview from the notebook if you are interested here:

coursera

How to submit

Copy the token below and run the submission script included in the assignment download. When prompted, use your email address **gpudja@gmail.com**.

Generate new token

Your submission token is unique to you and should not be shared with anyone. You may submit as many times as you like.