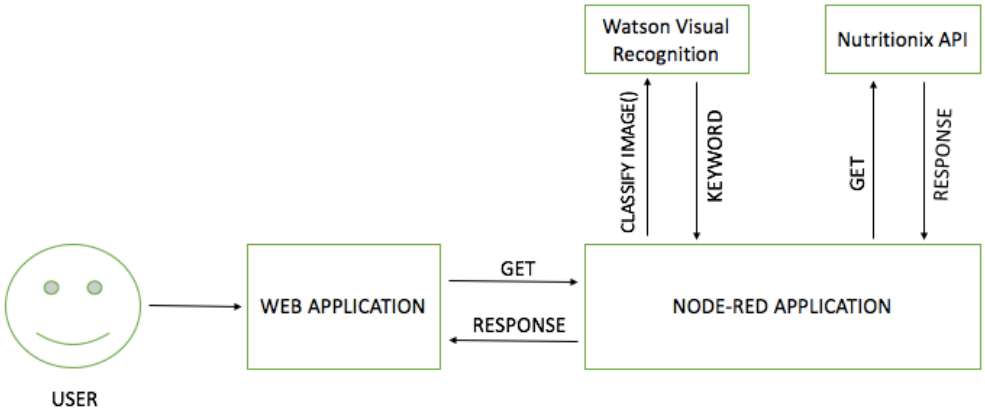
Calorie Counter App using Watson Visual Recognition

Simplify calorie counting using the power of IBM Watson Cognitive Services. IBM Watson Visual Recognition food model provides a built-in capability for recognizing 2,000+ different foods globally, which is perfectly suited to replace the manual process of food logging with automatic food identification using image recognition.

In this lab, you will create a calorie counter web app using Node-RED, Watson Visual Recognition and Nutritionix API. This web app analyses food images using Watson Visual Recognition service and extract nutritional information of the food analysed using Nutritionix API (The largest verified database of nutritional information).



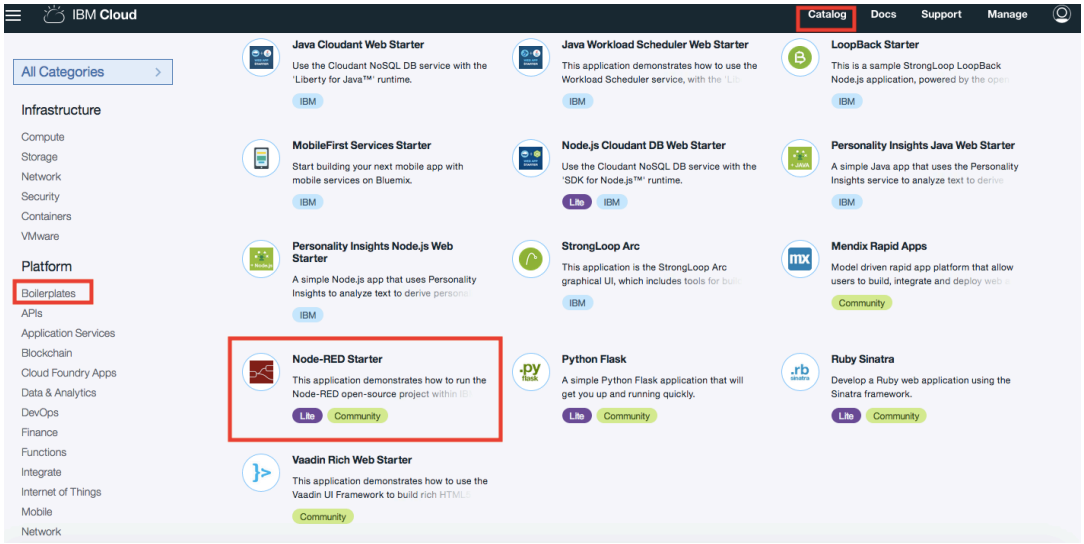
Pre-requisites:

1. An IBM Cloud account
2. Nutritionix **App ID and App Key**- Nutritionix data is used to gather nutritional information of an analyzed image. Instructions for obtaining a key can be found at Nutritionix.com

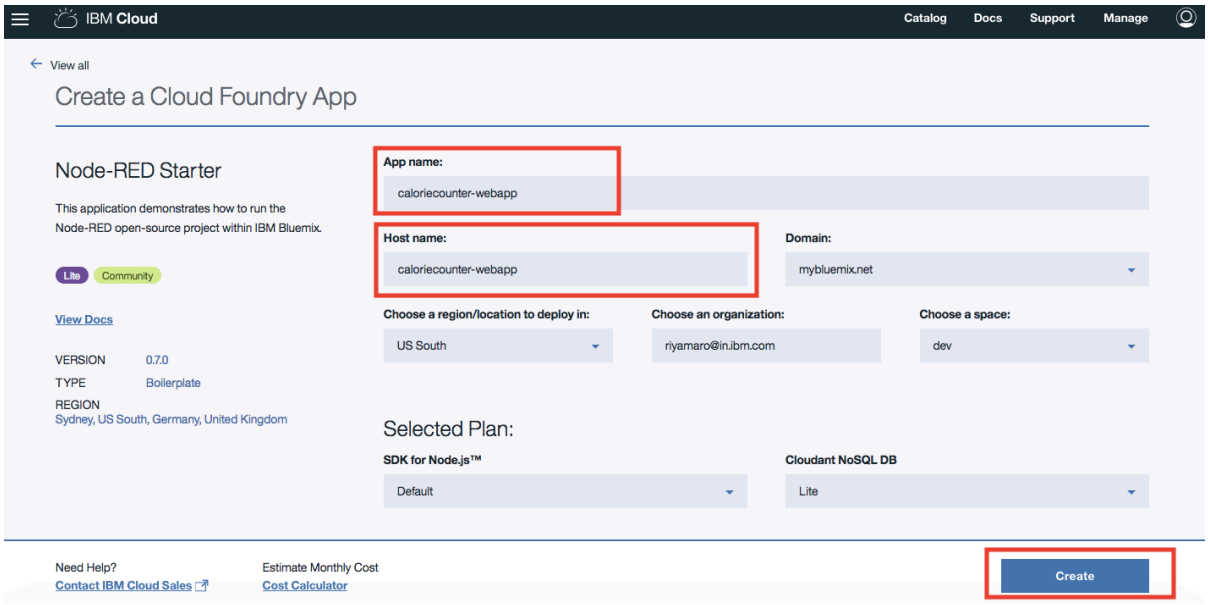
Steps:

1. Login to IBM Cloud Account

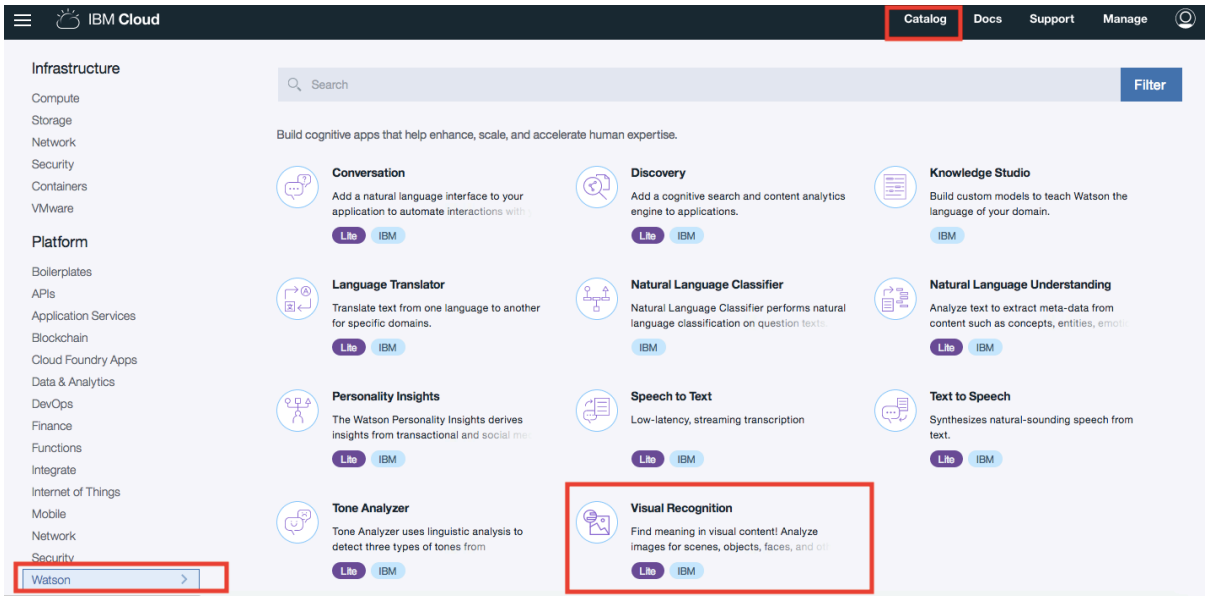
2. Create **NODE-RED Starter Boilerplate** from **Catalog.**

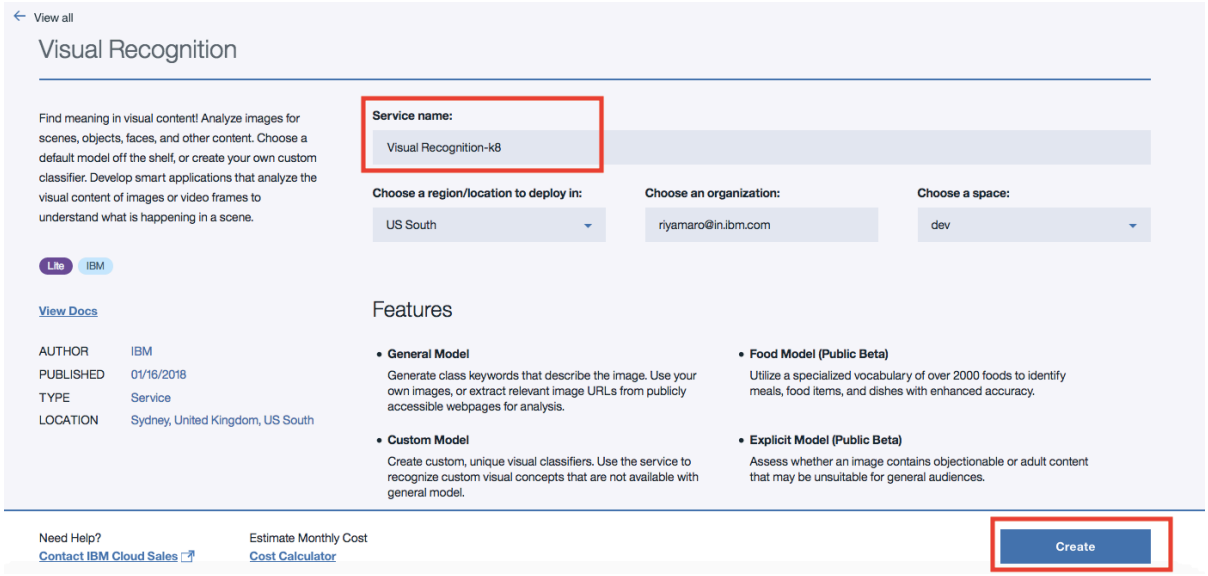


3. Enter ***App Name*** and ***Host name*** and click on ***Create.***

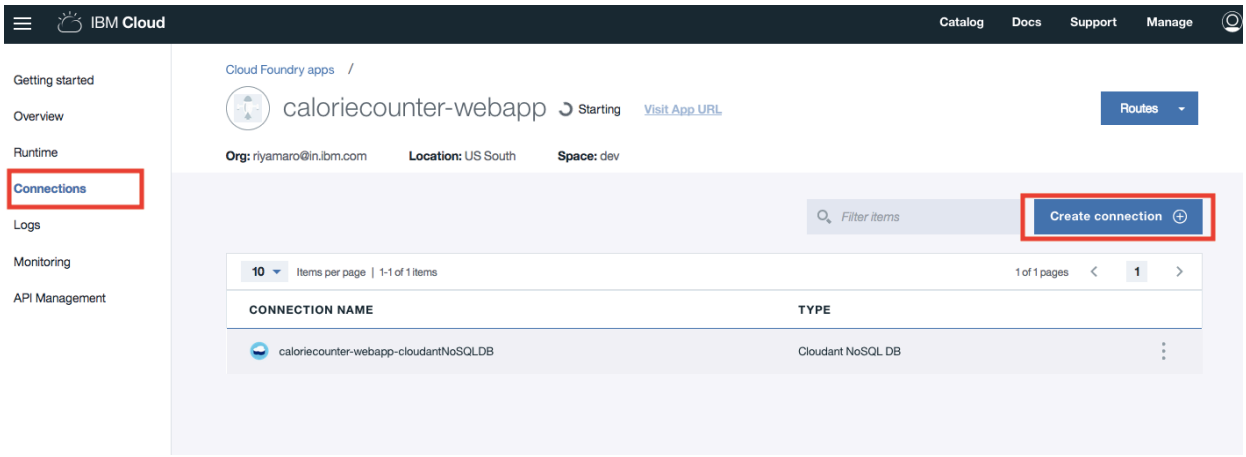


4. While App is staging, goto ***Catalog*** and ***Create Watson Visual Recognition Service***.

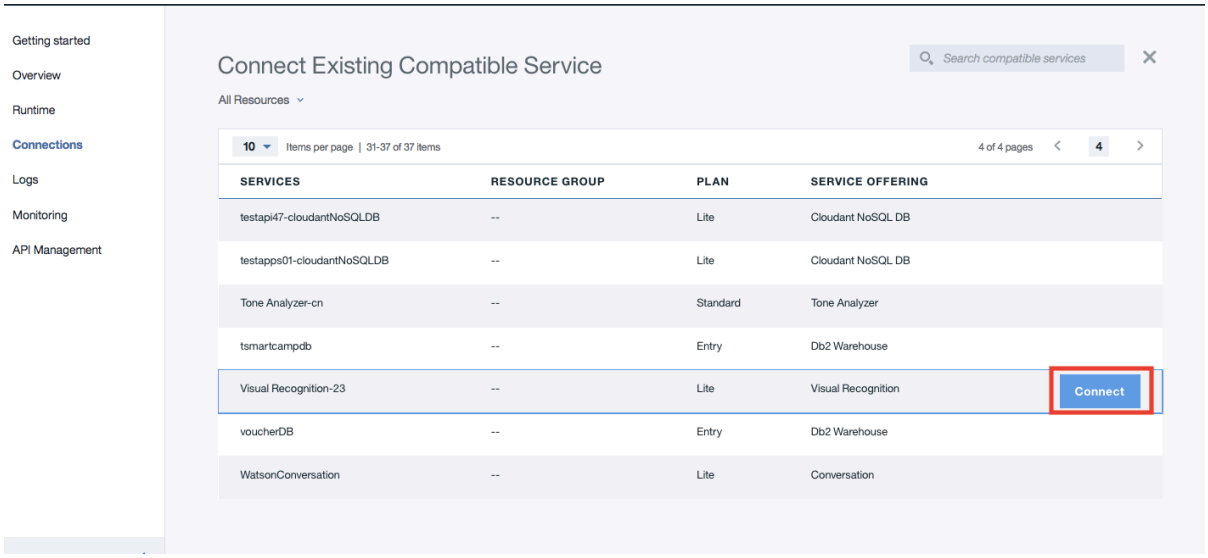




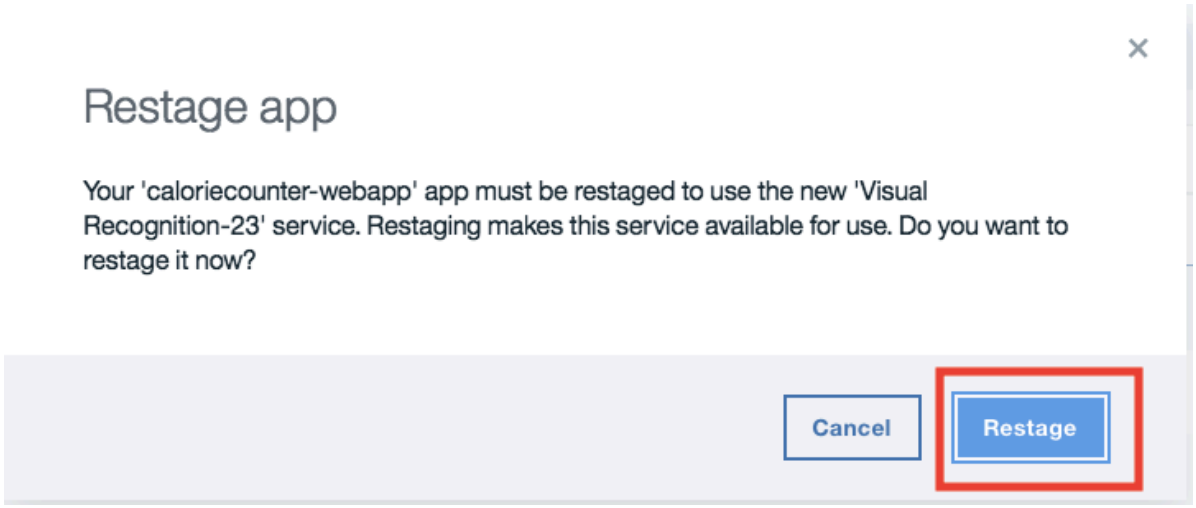
5. Open your app from Dashboard and click on ***Connections***. ***Click on Create Connection***.



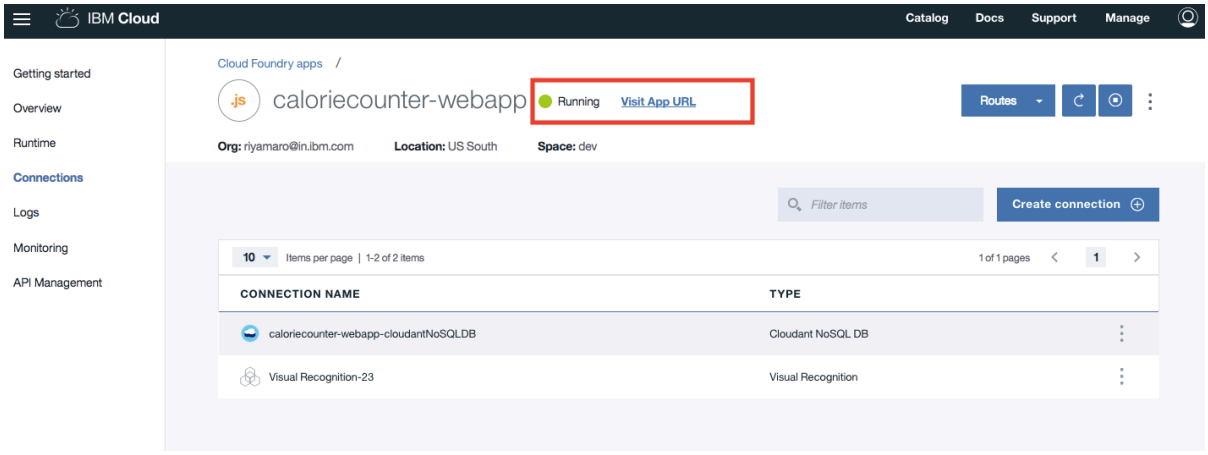
6. ***Connect*** recently created Visual Recognition Service to your application



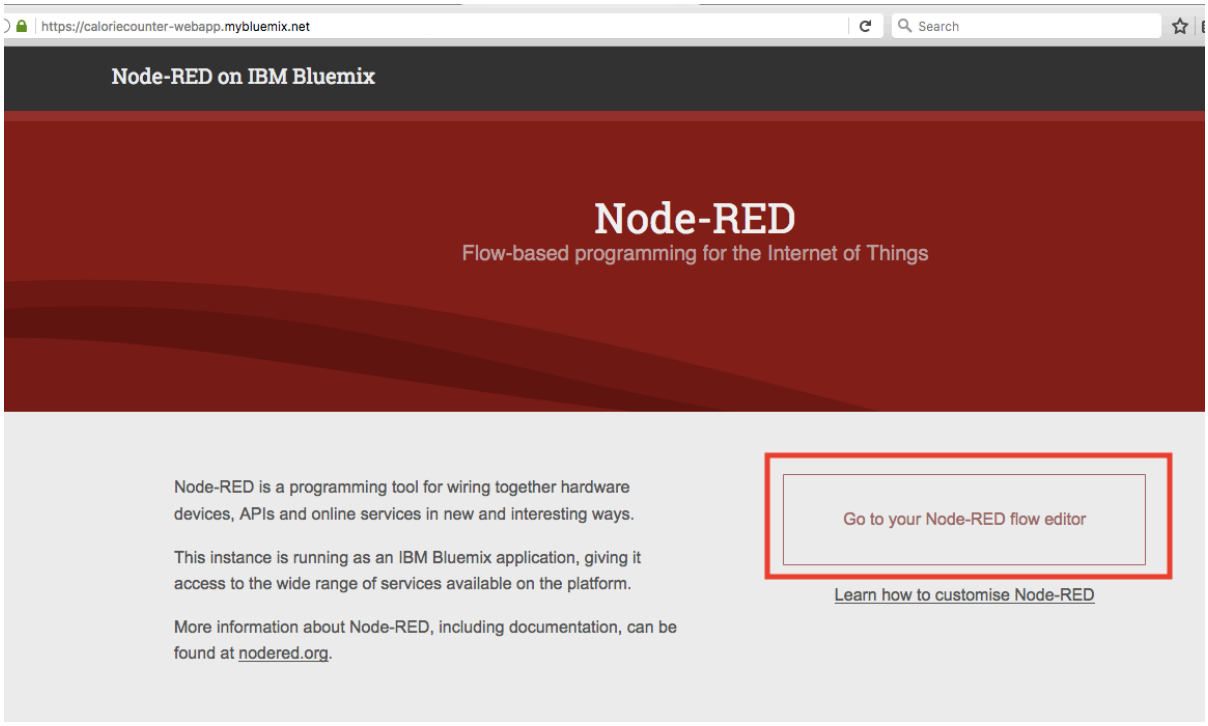
7. Click on ***Restage*** to restage the app with the latest connections and updates.



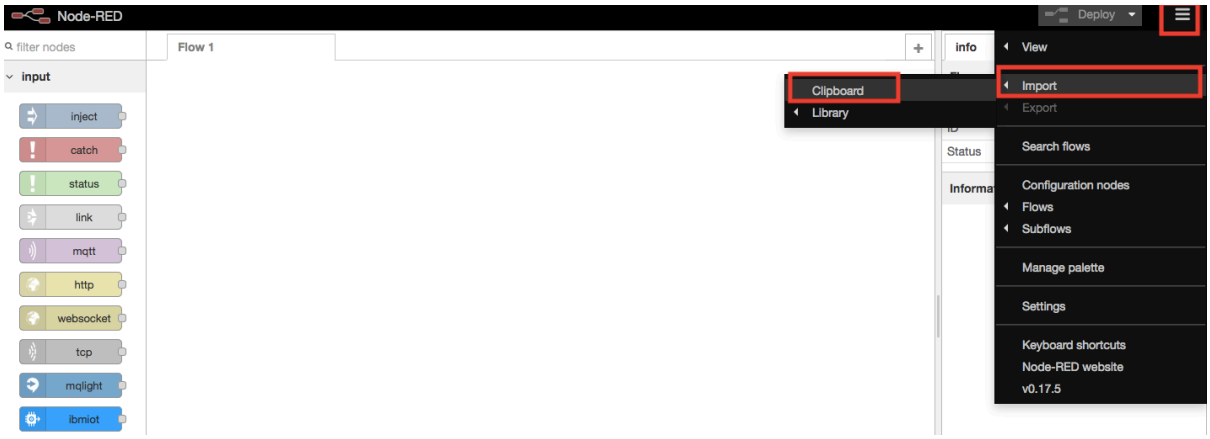
8. Open your application URL by clicking on ***Visit App URL***.

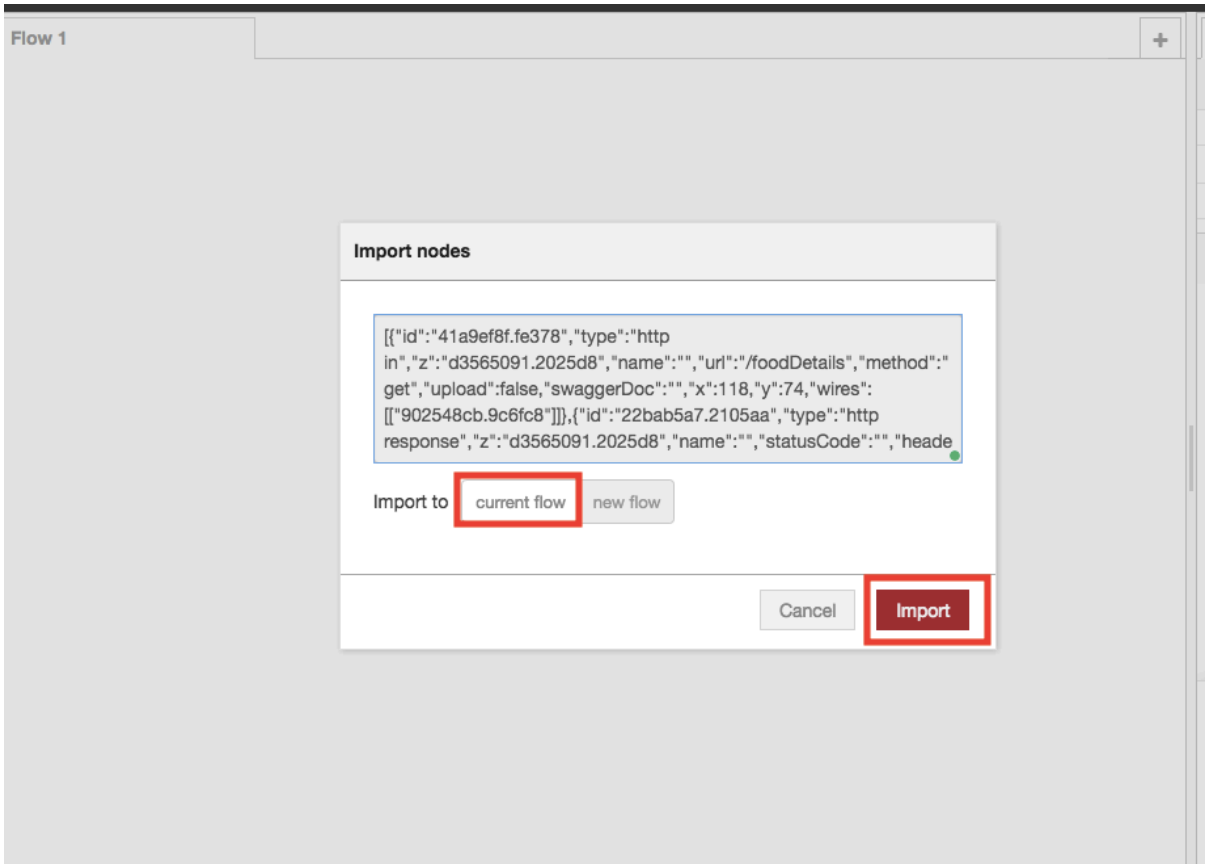


9. Click on ***Go to your Node-RED flow editor***. Before this step it might prompt for multiple other steps where you can enter details as prompted for if you want your NODE-RED flow to be secured.

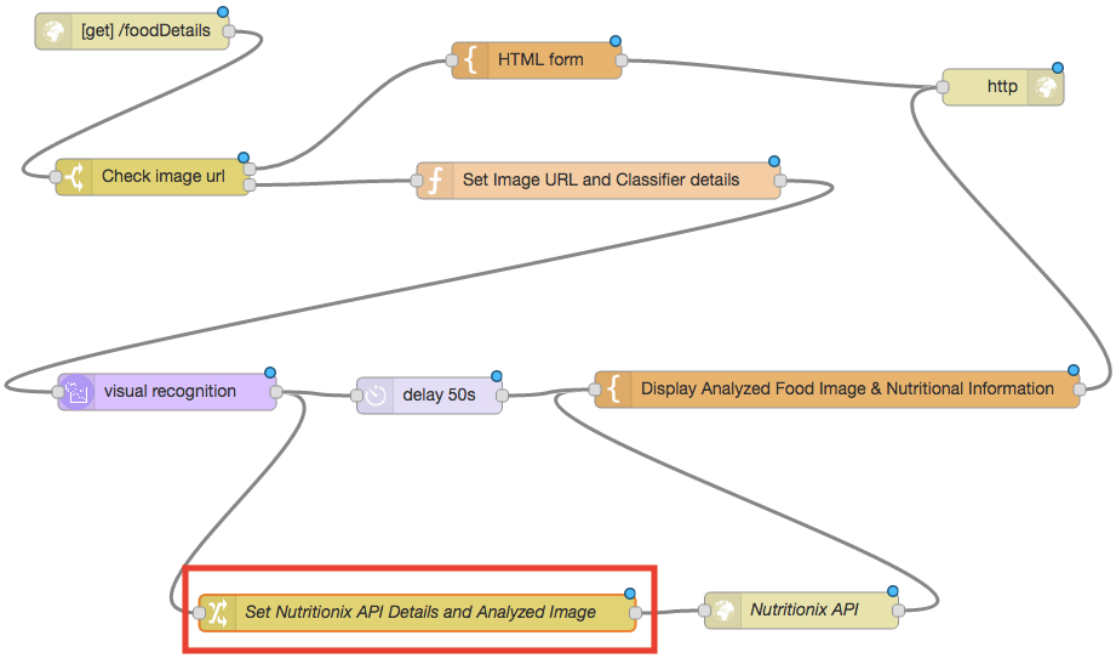


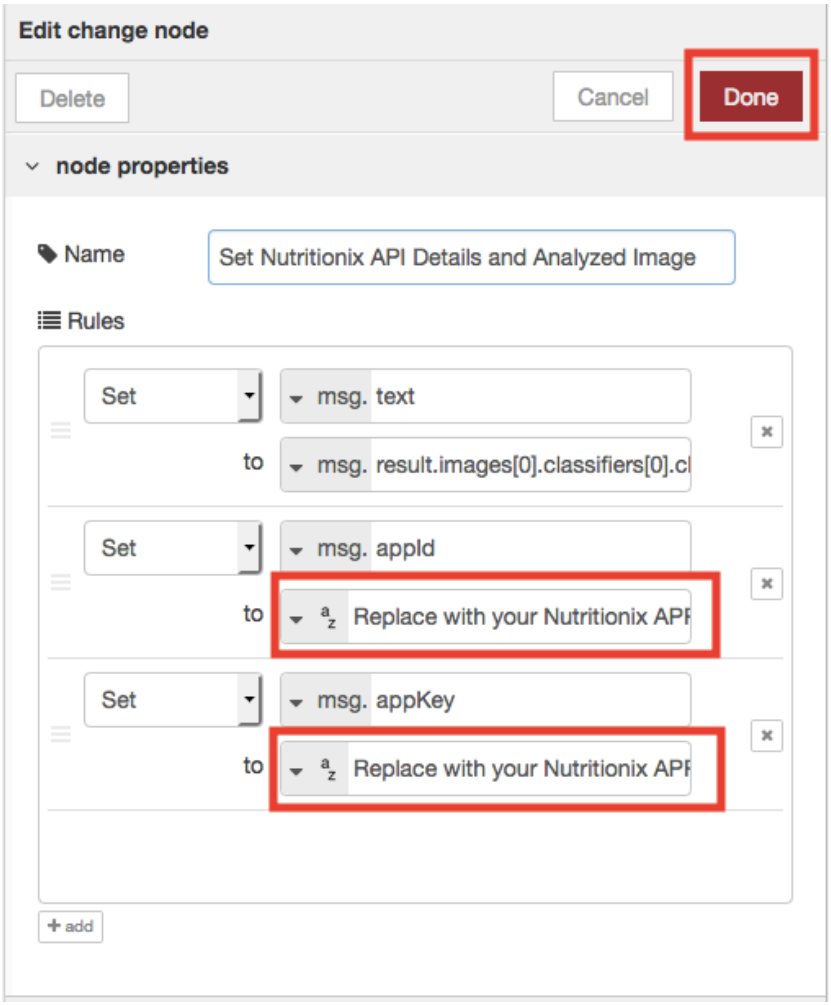
10. Import the NODE-RED flow as shown below from https://raw.githubusercontent.com/IBMDevConnect/IBMCodeDay-2018/master/Visual_Recognition_Minilab/calorie-counter-nodered-flow



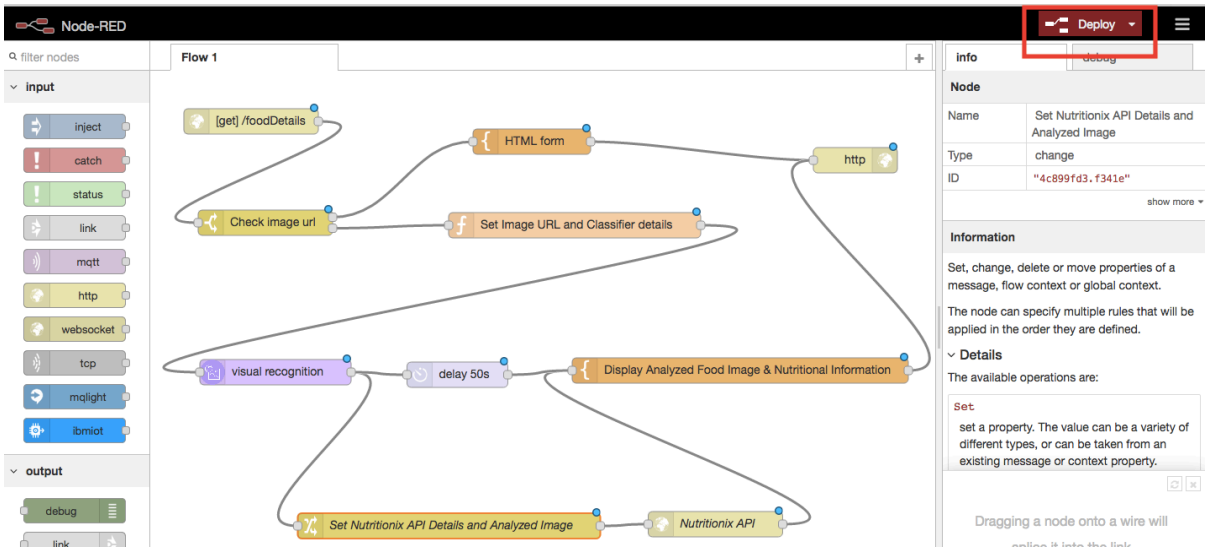


11. Double click on ***Set Nutritionix API Details and Analyzed Image*** and ***Update Nutritionix App ID*** and ***App Key*** with your App ID and App Key that you got after registering in Nutritionix Developer account.





12. Deploy the NODE-RED flow by clicking on ***Deploy***



13. In another tab, go to your ***Application URL*** <your_host_name>.mybluemix.net/foodDetails

14. Right click on any image and ***copy image location***. Enter image location in text box and analyse the image.

    Congratulations, you have now learnt to build a Calorie counter app using Watson Visual Recognition that can track your calorie with just a snap!

Sample Output:

Calorie Counter App using Watson Visual Recognition

Simplify your calorie counting using Watson Visual Recognition!

Right-click one of the above images and select Copy image location and paste the URL in the box below OR
Do an image search for food. After you click on an image, to the right it usually says "View image" click that to get the URL!

Image URL: Analyze

Calorie Counter App using Watson Visual Recognition

Simplify your calorie counting using Watson Visual Recognition!

Analyzed image: http://www.vegrecipesofindia.com/wp-content/uploads/2009/08/dhaba-style-dal-fry-recipe-0.jpg

Images Processed: 1

Watson Sees..

Classes	Confidence Score
dal tadka	0.784
lentil dish	0.784
vegetable	0.784
lentil soup	0.5
soup	0.511

Nutritional Information

ITEM NAME	CALORIES	TOTAL FAT	SERVING QUANTITY	SERVING SIZE UNIT
Dal Tadka	180	6	1	serving
Tadka Dal	108.67	6.9	1	serving

Related Links:

- https://developer.ibm.com/code/patterns/create-an-android-calorie-counter-app/
- https://www.ibm.com/blogs/bluemix/2016/10/watson-visual-recognition-training-best-practices/
- https://www.ibm.com/developerworks/library/cc-sample-code-image-classification-watson-node/index.html
- https://visual-recognition-demo.ng.bluemix.net/
- https://www.ibm.com/developerworks/library/cc-sample-code-facial-recognition-watson-node/index.html