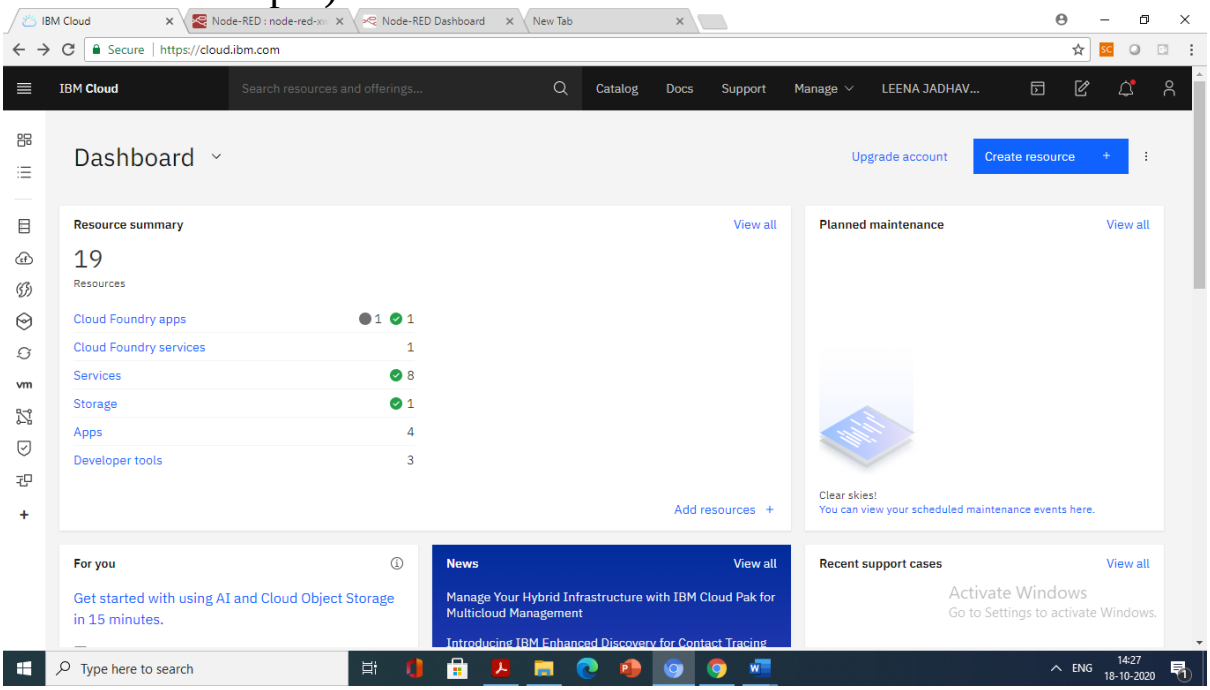
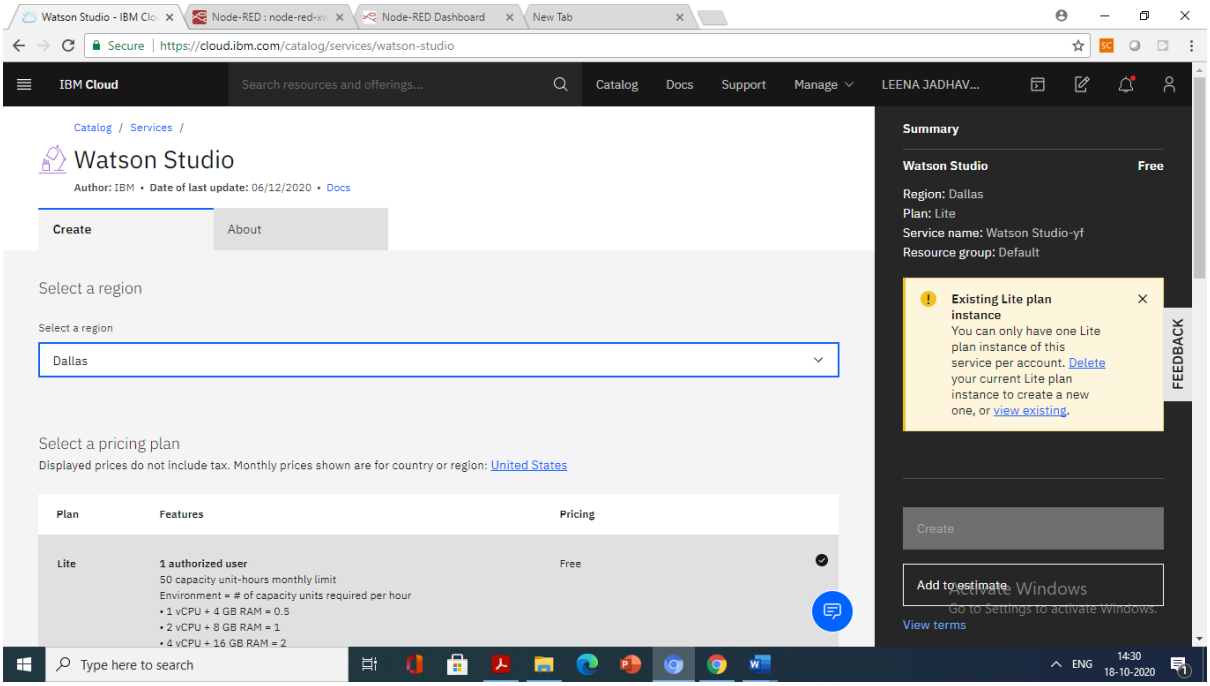
Project- Track workplace condition to ensure employees safety in warehouse

1. IBM Cloud go to Catalog - services - AI/ML - Watson Studio
or search for "Watson Studio"
2. Change region to Dallas and click on create button
3. Click on Get Started
4. Click on New Project
5. Click on "Create an empty project"
6. Give name as "Classification" and click on Add button (this helps in adding the cloud object storage service by creating)
7. Click on create
8. Click on add to project
9. Click on visual recognition service
10. Click on click here
11. Click on new service
12. Click on visual recognition
13. Click on create
14. visual Recognition-ng created
15. Select the checkbox and click on associate service
16. In Custom model click on Create model and add images for classification by using browse button and train the data.
17. Click on test – browse any image
18. Success full
19. Create a node-red application using Node-red App
20. Created a GUI using Node-red, added API key and Visual recognition and model ID and deployed an application and checked the image is trained properly and got the correct output.

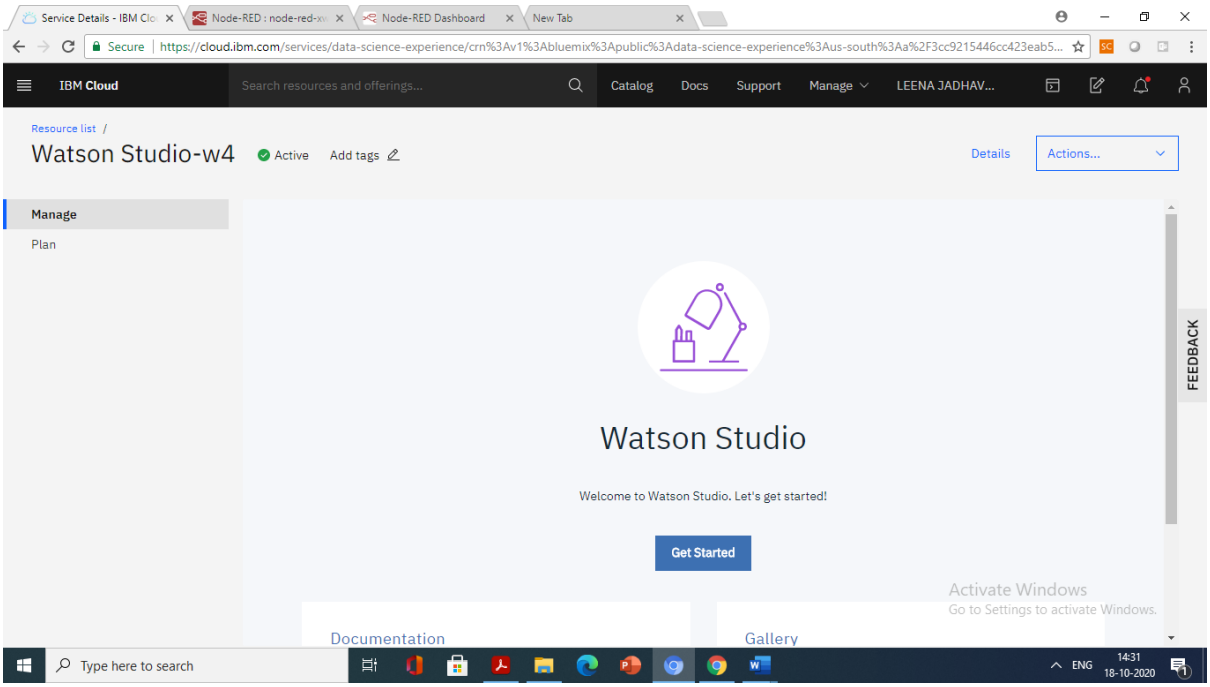
Snapshots of Working of Project
(Visual recognition , Custom Model development and Node-Red Application with Output)



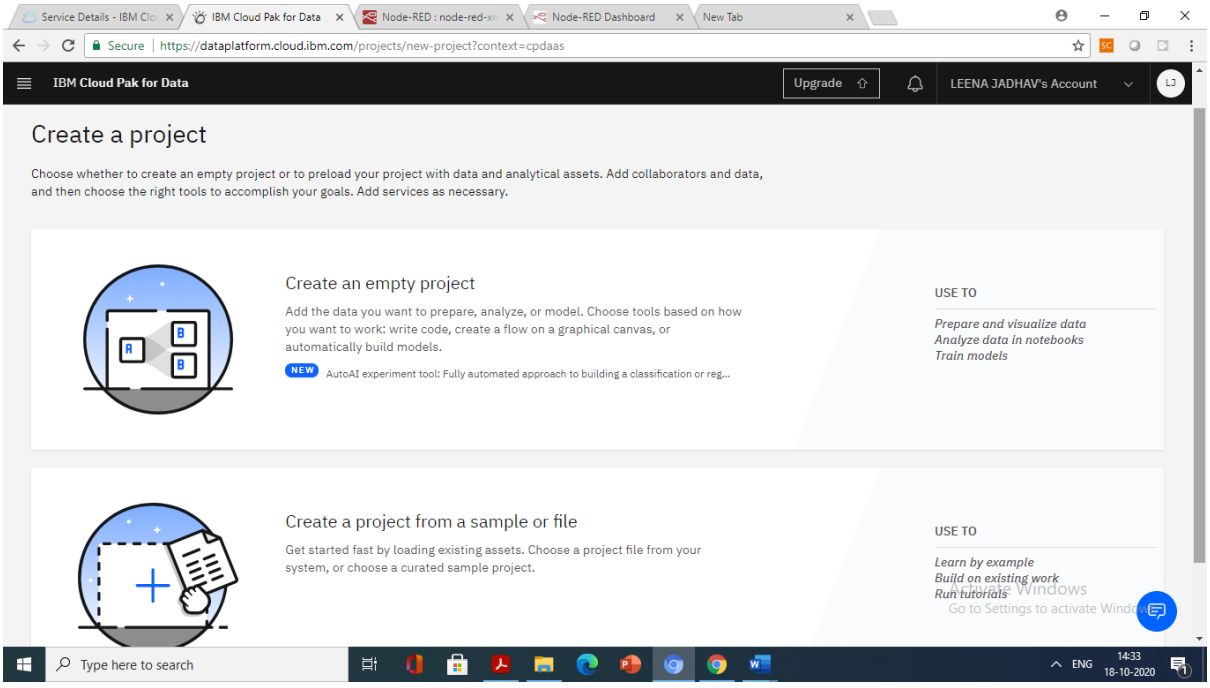
2.



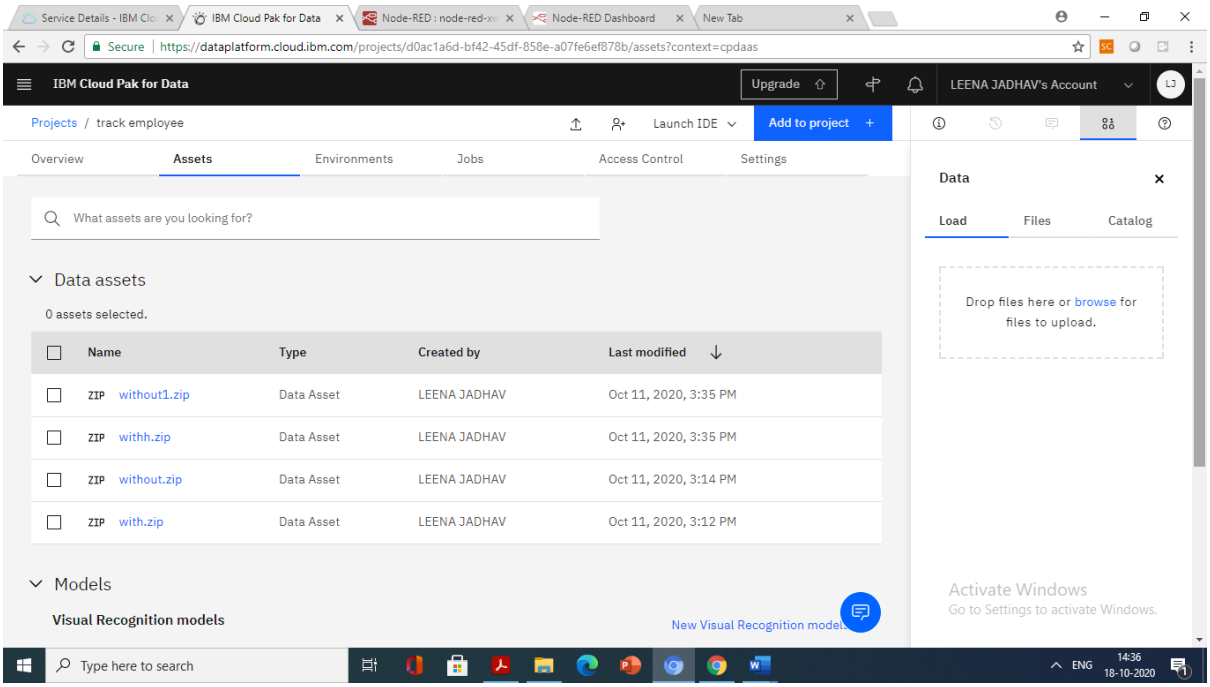
3.


Service Details - IBM Clo
Node-RED : node-red-xv
Node-RED Dashboard
New Tab
Secure | https://cloud.ibm.com/services/data-science-experience/crn%3Av1%3Abluemix%3Apublic%3Adata-science-experience%3Aus-south%3Aa%2F3cc9215446cc423eab5...
IBM Cloud
Search resources and offerings...
Catalog
Docs
Support
Manage
LEENA JADHAV...
Resource list /
Watson Studio-w4
Active
Add tags
Details
Actions...
Manage
Plan
FEEDBACK
Watson Studio
Welcome to Watson Studio. Let's get started!
Get Started
Activate Windows
Go to Settings to activate Windows.
Documentation
Gallery
Type here to search
ENG
14:31
18-10-2020

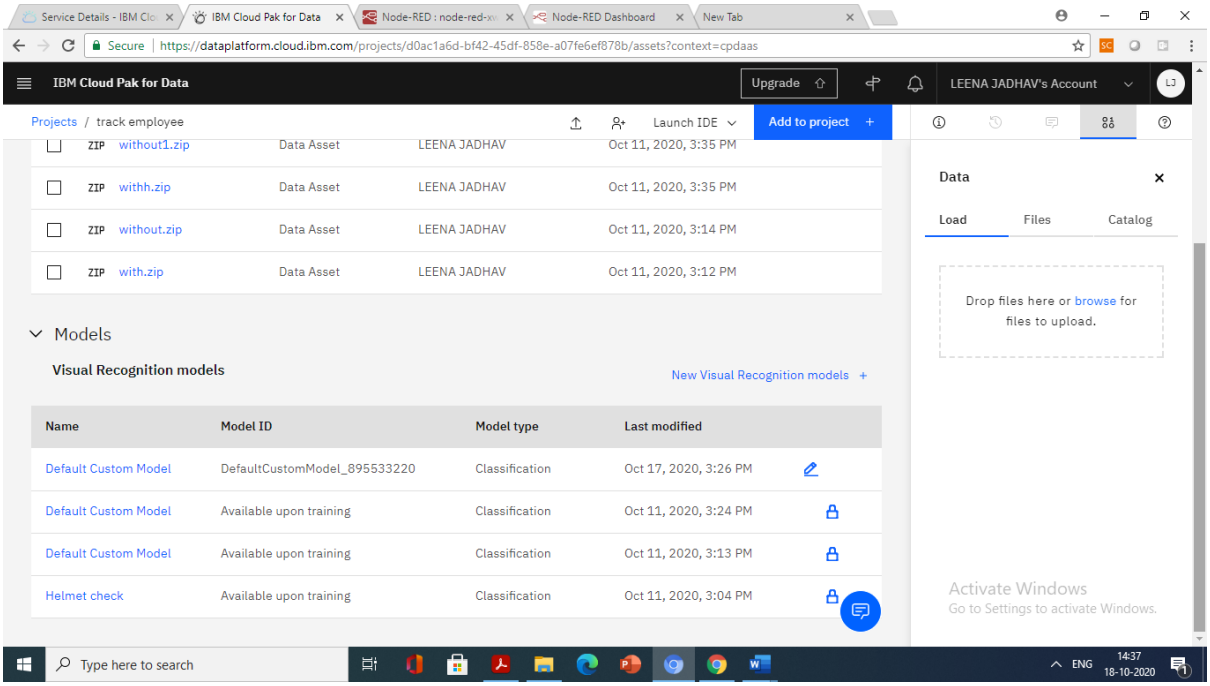
4.


Service Details - IBM Clo
IBM Cloud Pak for Data
Node-RED : node-red-xv
Node-RED Dashboard
New Tab
Secure | https://dataplatform.cloud.ibm.com/projects/new-project?context=cpdaas
IBM Cloud Pak for Data
Upgrade
LEENA JADHAV's Account
Create a project
Choose whether to create an empty project or to preload your project with data and analytical assets. Add collaborators and data, and then choose the right tools to accomplish your goals. Add services as necessary.
Create an empty project
Add the data you want to prepare, analyze, or model. Choose tools based on how you want to work: write code, create a flow on a graphical canvas, or automatically build models.
NEW
AutoAI experiment tool: Fully automated approach to building a classification or reg...
USE TO
Prepare and visualize data
Analyze data in notebooks
Train models
Create a project from a sample or file
Get started fast by loading existing assets. Choose a project file from your system, or choose a curated sample project.
USE TO
Learn by example
Build on existing work
Run tutorials
Activate Windows
Go to Settings to activate Windows.
Type here to search
ENG
14:33
18-10-2020

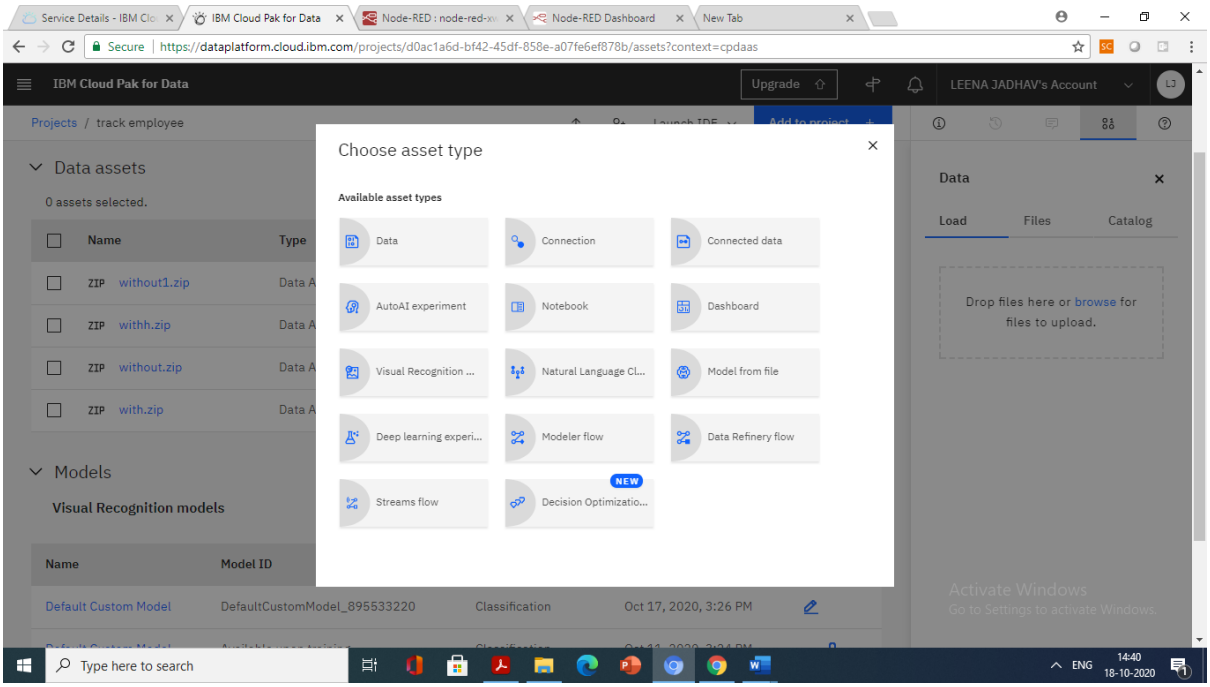
5.


Service Details - IBM Clo
IBM Cloud Pak for Data
Node-RED : node-red-xv
Node-RED Dashboard
New Tab
Secure | https://dataplatform.cloud.ibm.com/projects/d0ac1a6d-bf42-45df-858e-a07fe6ef878b/assets?context=cpdaas
IBM Cloud Pak for Data
Upgrade
LEENA JADHAV's Account
Projects / track employee
Launch IDE
Add to project
Overview
Assets
Environments
Jobs
Access Control
Settings
What assets are you looking for?
Data assets
0 assets selected.
Name
Type
Created by
Last modified
ZIP without1.zip Data Asset LEENA JADHAV Oct 11, 2020, 3:35 PM
ZIP withh.zip Data Asset LEENA JADHAV Oct 11, 2020, 3:35 PM
ZIP without.zip Data Asset LEENA JADHAV Oct 11, 2020, 3:14 PM
ZIP with.zip Data Asset LEENA JADHAV Oct 11, 2020, 3:12 PM
Models
Visual Recognition models
New Visual Recognition models
Data
Load
Files
Catalog
Drop files here or browse for files to upload.
Activate Windows
Go to Settings to activate Windows.
Type here to search
ENG
14:36
18-10-2020

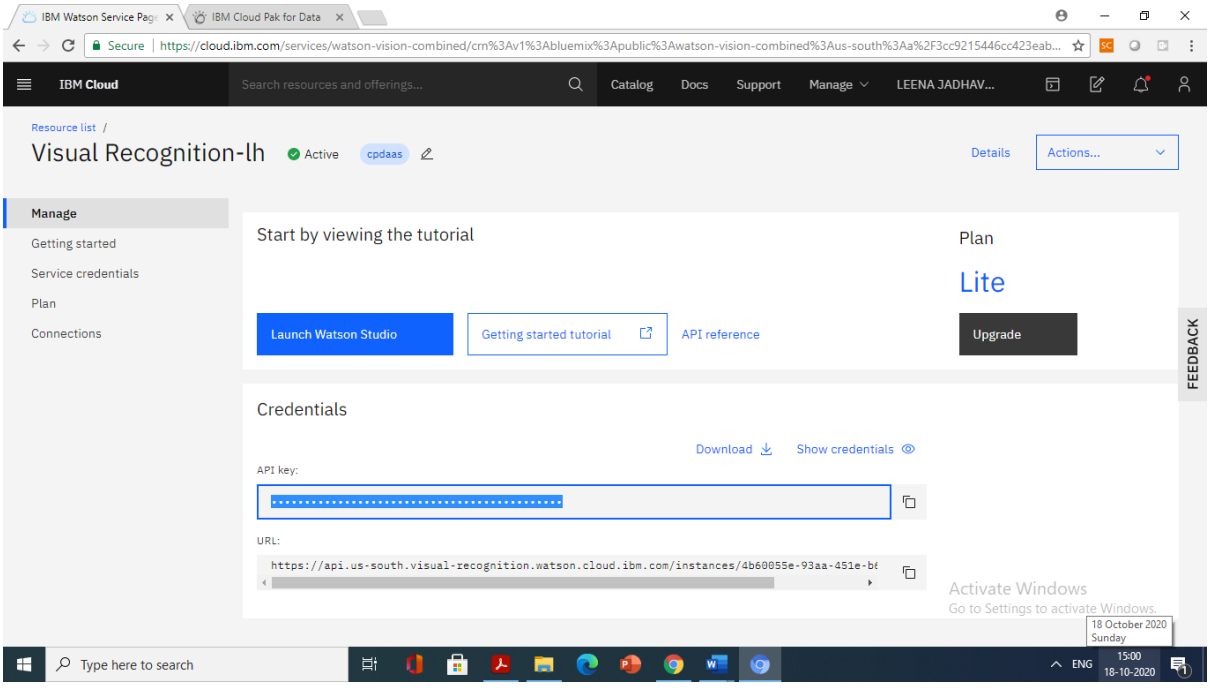
6.


Service Details - IBM Clo
IBM Cloud Pak for Data
Node-RED : node-red-xv
Node-RED Dashboard
New Tab
Secure | https://dataplatform.cloud.ibm.com/projects/d0ac1a6d-bf42-45df-858e-a07fe6ef878b/assets?context=cpdaas
IBM Cloud Pak for Data
Upgrade
LEENA JADHAV's Account
Projects / track employee
Launch IDE
Add to project
ZIP without1.zip Data Asset LEENA JADHAV Oct 11, 2020, 3:35 PM
ZIP withh.zip Data Asset LEENA JADHAV Oct 11, 2020, 3:35 PM
ZIP without.zip Data Asset LEENA JADHAV Oct 11, 2020, 3:14 PM
ZIP with.zip Data Asset LEENA JADHAV Oct 11, 2020, 3:12 PM
Models
Visual Recognition models
New Visual Recognition models
Name
Model ID
Model type
Last modified
Default Custom Model DefaultCustomModel_895533220 Classification Oct 17, 2020, 3:26 PM
Default Custom Model Available upon training Classification Oct 11, 2020, 3:24 PM
Default Custom Model Available upon training Classification Oct 11, 2020, 3:13 PM
Helmet check Available upon training Classification Oct 11, 2020, 3:04 PM
Data
Load
Files
Catalog
Drop files here or browse for files to upload.
Activate Windows
Go to Settings to activate Windows.
Type here to search
ENG
14:37
18-10-2020

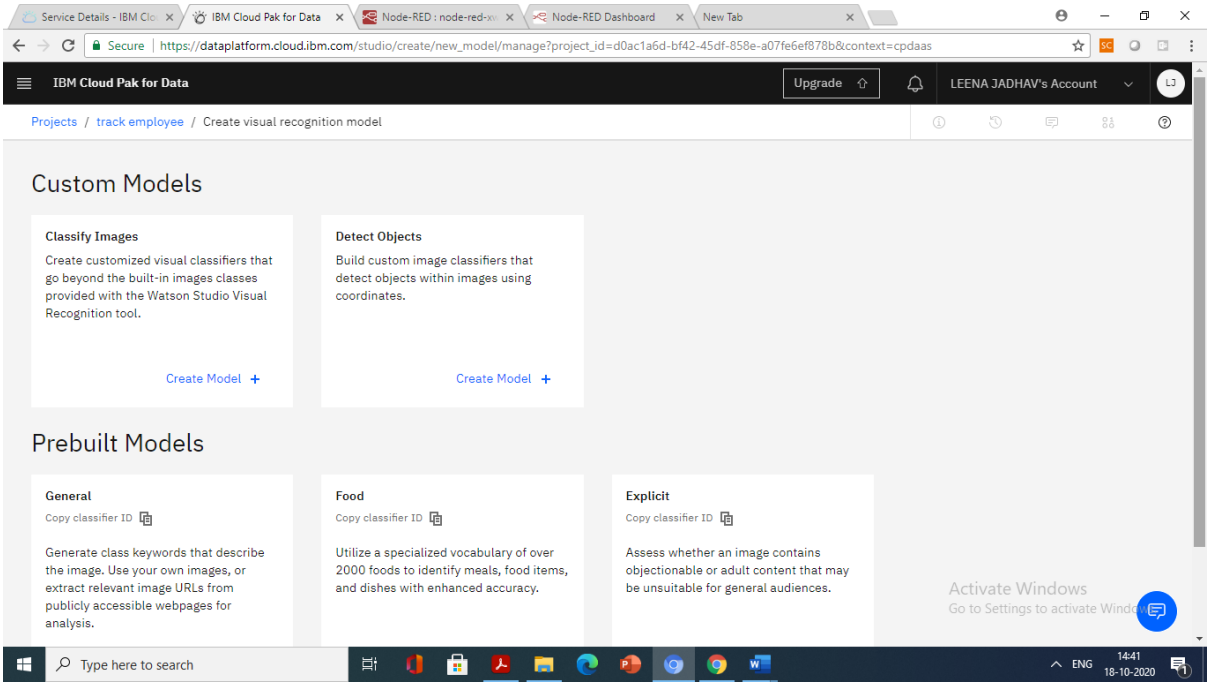
7.


IBM Cloud Pak for Data
Upgrade
LEENA JADHAV's Account
Projects / track employee
Data assets
0 assets selected.
Name
Type
ZIP without1.zip
ZIP withh.zip
ZIP without.zip
ZIP with.zip
Models
Visual Recognition models
Name
Model ID
Default Custom Model
DefaultCustomModel_895533220
Classification
Oct 17, 2020, 3:26 PM
Choose asset type
Available asset types
Data
Connection
Connected data
AutoAI experiment
Notebook
Dashboard
Visual Recognition ...
Natural Language Cl...
Model from file
Deep learning experi...
Modeler flow
Data Refinery flow
Streams flow
NEW
Decision Optimizatio...
Data
Load
Files
Catalog
Drop files here or browse for files to upload.
Activate Windows
Go to Settings to activate Windows.
Type here to search
ENG
14:40
18-10-2020

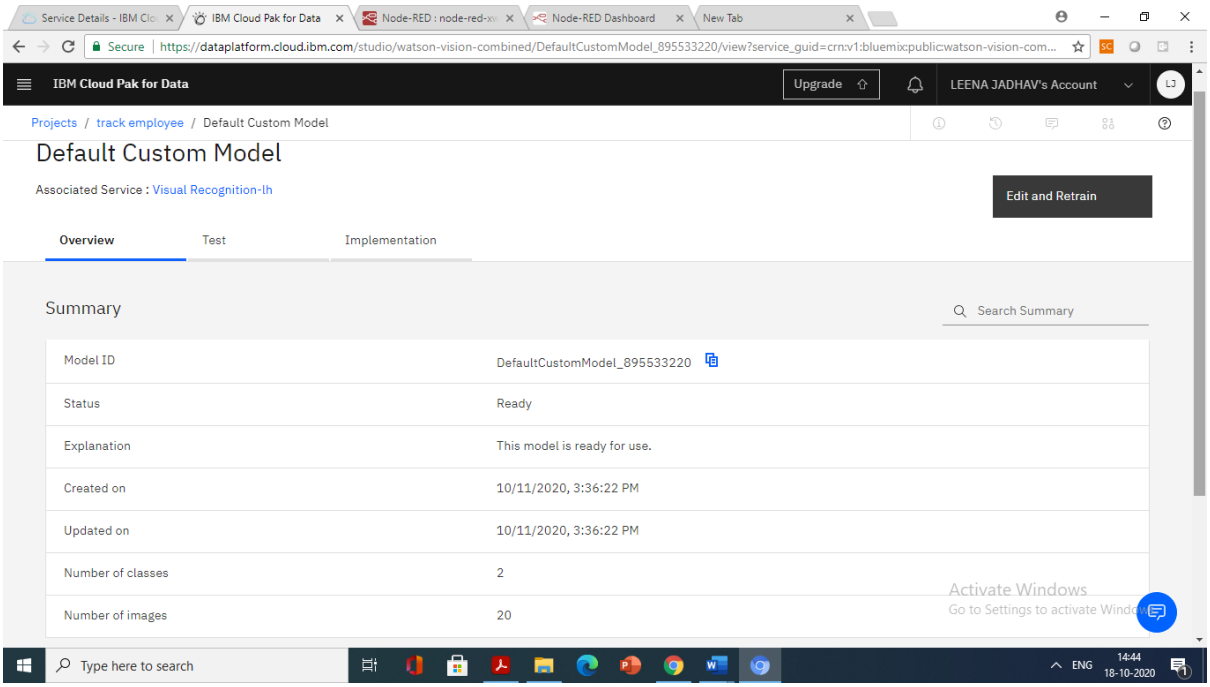
8.


IBM Cloud
Search resources and offerings...
Catalog
Docs
Support
Manage
LEENA JADHAV...
Resource list /
Visual Recognition-lh
Active
cpdaas
Details
Actions...
Manage
Getting started
Service credentials
Plan
Connections
Start by viewing the tutorial
Launch Watson Studio
Getting started tutorial
API reference
Plan
Lite
Upgrade
FEEDBACK
Credentials
Download
Show credentials
API key:
URL:
https://api.us-south.visual-recognition.watson.cloud.ibm.com/instances/4b60055e-93aa-451e-b
Activate Windows
Go to Settings to activate Windows.
18 October 2020
Sunday
Type here to search
ENG
15:00
18-10-2020

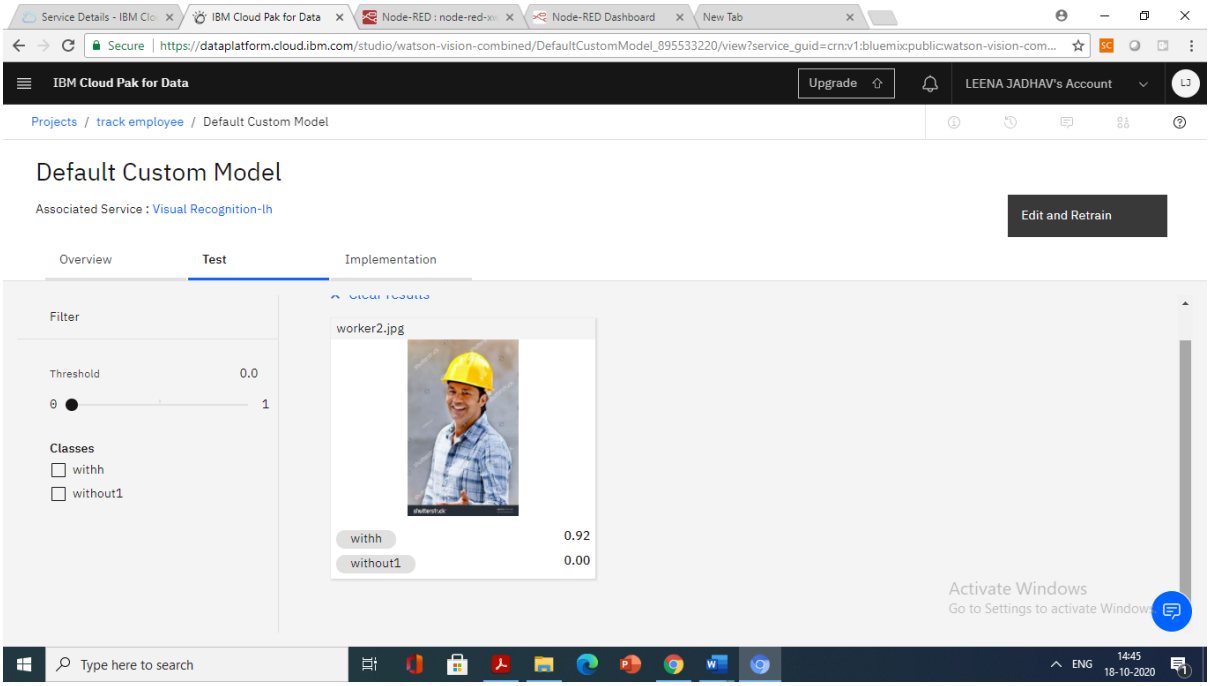
9.


IBM Cloud Pak for Data
Upgrade
LEENA JADHAV's Account
Projects / track employee / Create visual recognition model
Custom Models
Classify Images
Create customized visual classifiers that go beyond the built-in images classes provided with the Watson Studio Visual Recognition tool.
Create Model +
Detect Objects
Build custom image classifiers that detect objects within images using coordinates.
Create Model +
Prebuilt Models
General
Copy classifier ID
Generate class keywords that describe the image. Use your own images, or extract relevant image URLs from publicly accessible webpages for analysis.
Food
Copy classifier ID
Utilize a specialized vocabulary of over 2000 foods to identify meals, food items, and dishes with enhanced accuracy.
Explicit
Copy classifier ID
Assess whether an image contains objectionable or adult content that may be unsuitable for general audiences.
Activate Windows
Type here to search
ENG
14:41
18-10-2020

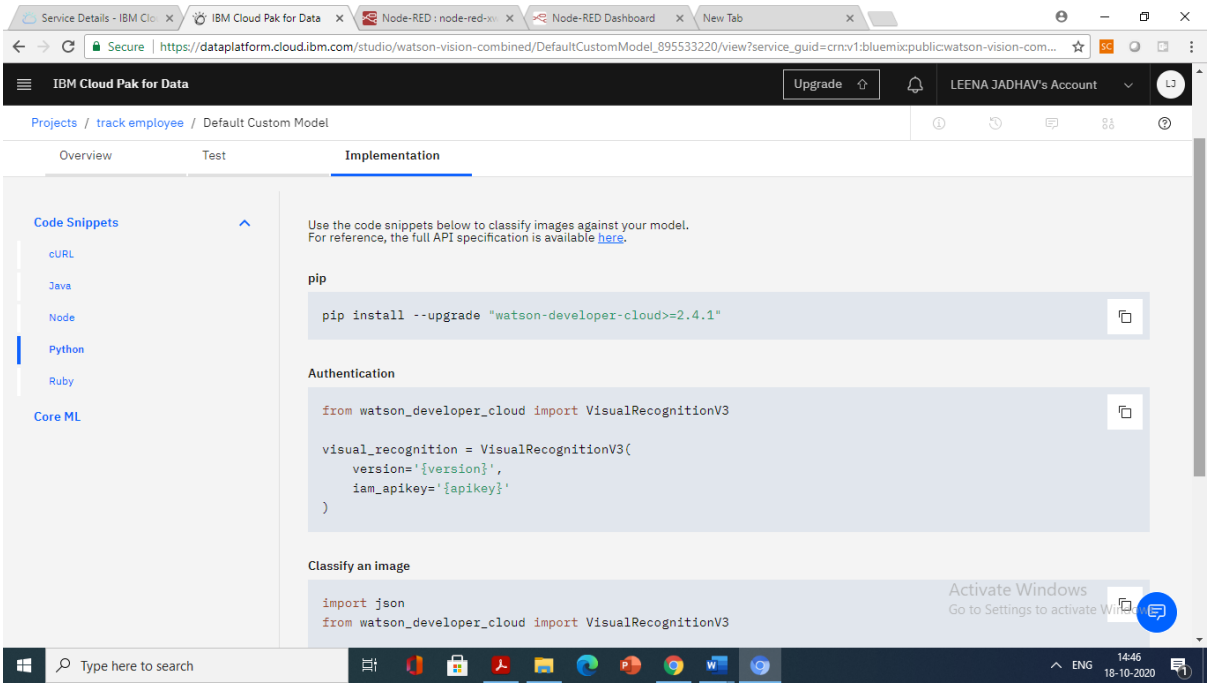
10


IBM Cloud Pak for Data
Upgrade
LEENA JADHAV's Account
Projects / track employee / Default Custom Model
Default Custom Model
Associated Service : Visual Recognition-lh
Edit and Retrain
Overview
Test
Implementation
Summary
Search Summary
Model ID
DefaultCustomModel_895533220
Status
Ready
Explanation
This model is ready for use.
Created on
10/11/2020, 3:36:22 PM
Updated on
10/11/2020, 3:36:22 PM
Number of classes
2
Number of images
20
Activate Windows
Type here to search
ENG
14:44
18-10-2020

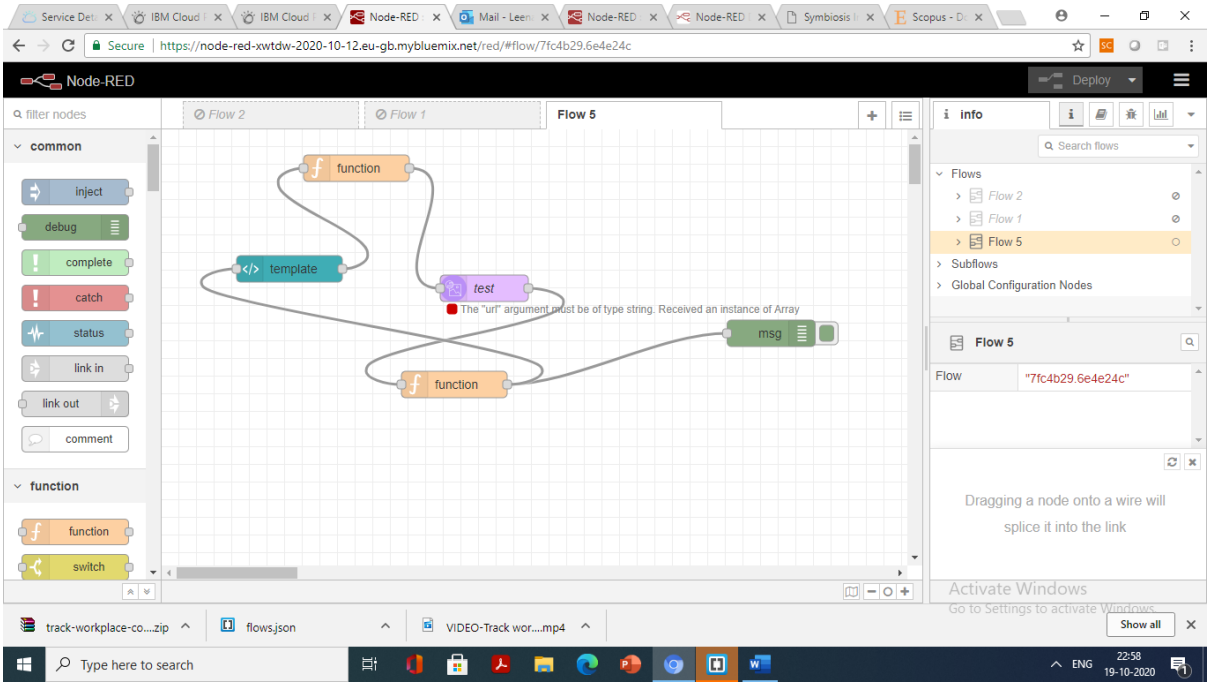
11


IBM Cloud Pak for Data
Upgrade
LEENA JADHAV's Account
Projects / track employee / Default Custom Model
Default Custom Model
Associated Service : Visual Recognition-lh
Edit and Retrain
Overview
Test
Implementation
Filter
Threshold
0.0
0
1
Classes
withh
without1
worker2.jpg
withh
0.92
without1
0.00
Activate Windows
Type here to search
ENG
14:45
18-10-2020

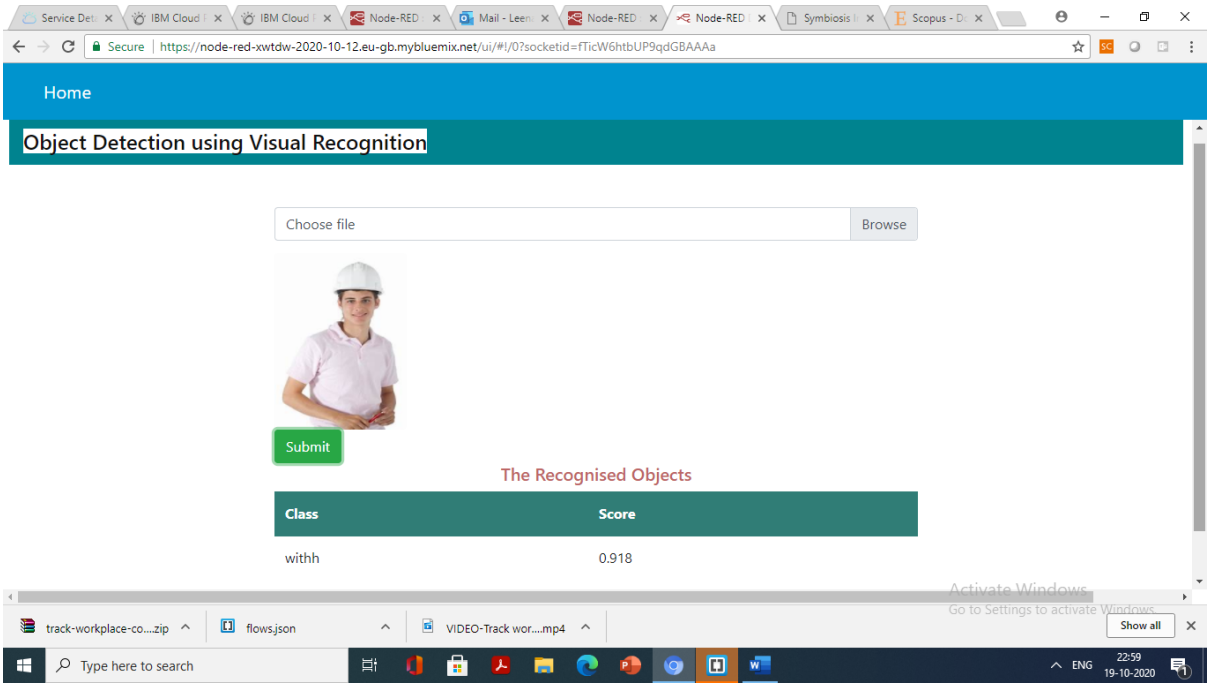
12

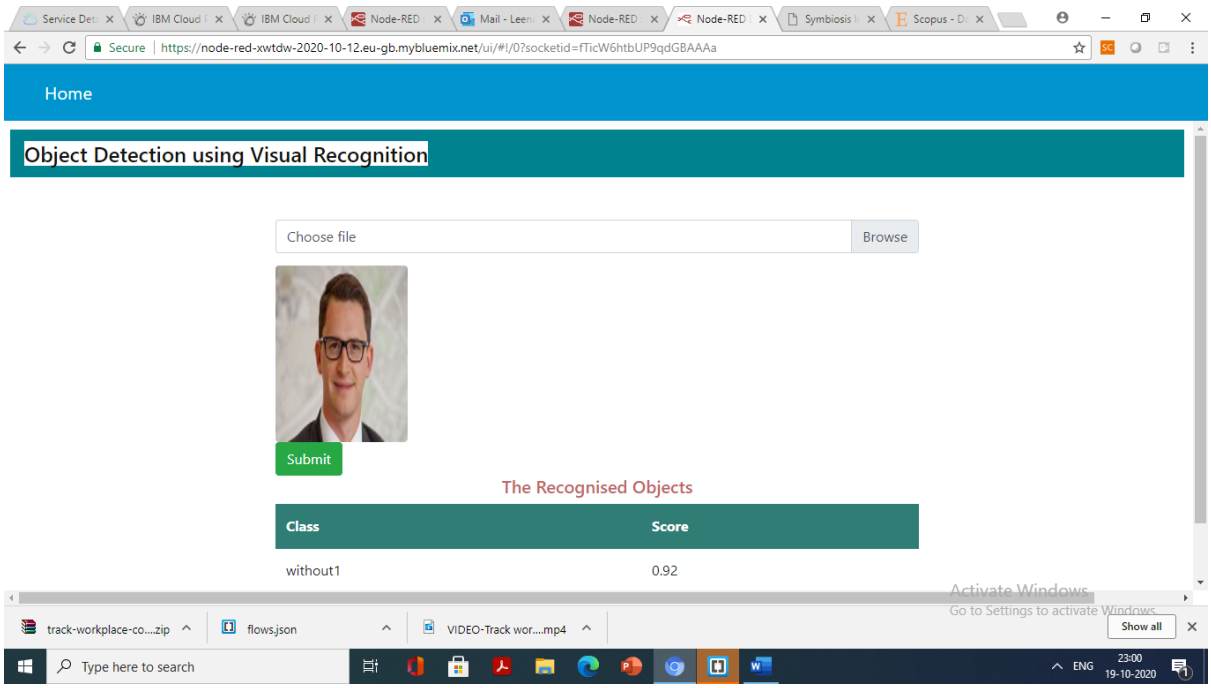

IBM Cloud Pak for Data
Upgrade
LEENA JADHAV's Account
Projects / track employee / Default Custom Model
Overview
Test
Implementation
Code Snippets
cURL
Java
Node
Python
Ruby
Core ML
Use the code snippets below to classify images against your model.
For reference, the full API specification is available here.
pip
pip install --upgrade "watson-developer-cloud>=2.4.1"
Authentication
from watson_developer_cloud import VisualRecognitionV3
visual_recognition = VisualRecognitionV3(
version='{version}',
iam_apikey='{apikey}'
)
Classify an image
import json
from watson_developer_cloud import VisualRecognitionV3
Activate Windows
Type here to search
ENG
14:46
18-10-2020

13


Node-RED
Deploy
filter nodes
Flow 2
Flow 1
Flow 5
common
inject
debug
complete
catch
status
link in
link out
comment
function
function
switch
template
test
The "url" argument must be of type string. Received an instance of Array
msg
function
info
Search flows
Flows
Flow 2
Flow 1
Flow 5
Subflows
Global Configuration Nodes
Flow 5
Flow
"7fc4b29.6e4e24c"
Dragging a node onto a wire will splice it into the link
Activate Windows
Go to Settings to activate Windows.
track-workplace-co....zip
flows.json
VIDEO-Track wor....mp4
Show all
Type here to search
ENG
22:58
19-10-2020

14.


Home
Object Detection using Visual Recognition
Choose file
Browse
Submit
The Recognised Objects
Class
Score
withh
0.918
Activate Windows
Go to Settings to activate Windows.
track-workplace-co....zip
flows.json
VIDEO-Track wor....mp4
Show all
Type here to search
ENG
22:59
19-10-2020


Home
Object Detection using Visual Recognition
Choose file
Browse
Submit
The Recognised Objects
Class
Score
without1
0.92
Activate Windows
Go to Settings to activate Windows.
track-workplace-co....zip
flows.json
VIDEO-Track wor....mp4
Show all
Type here to search
ENG
23:00
19-10-2020