

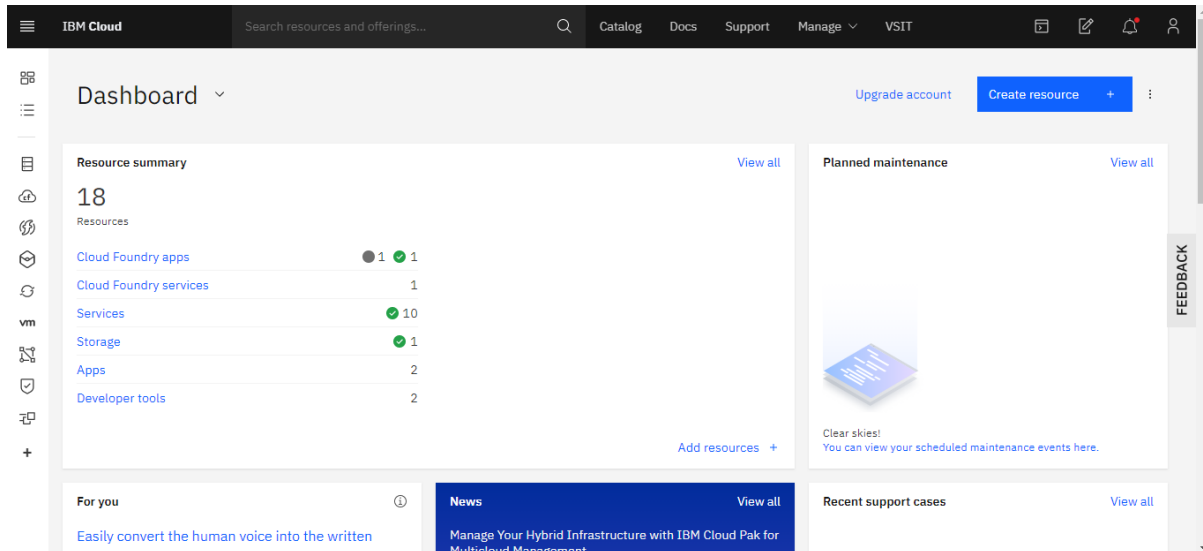
Project- Track workplace condition to ensure employees safety in warehouse

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.

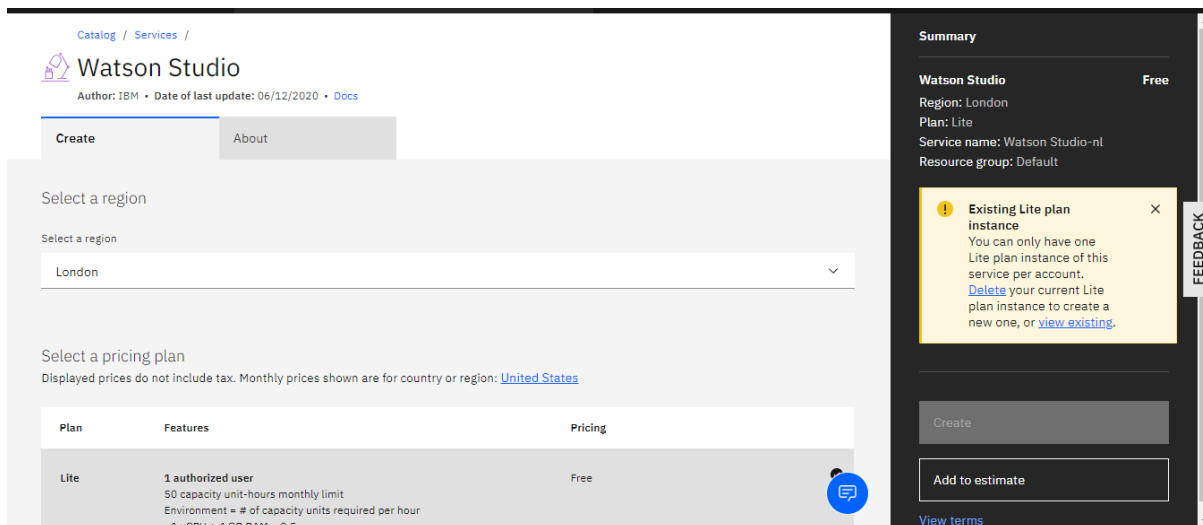
Snapshots of Working of Project

(Visual recognition , Custom Model development and Node-Red Application with Output)

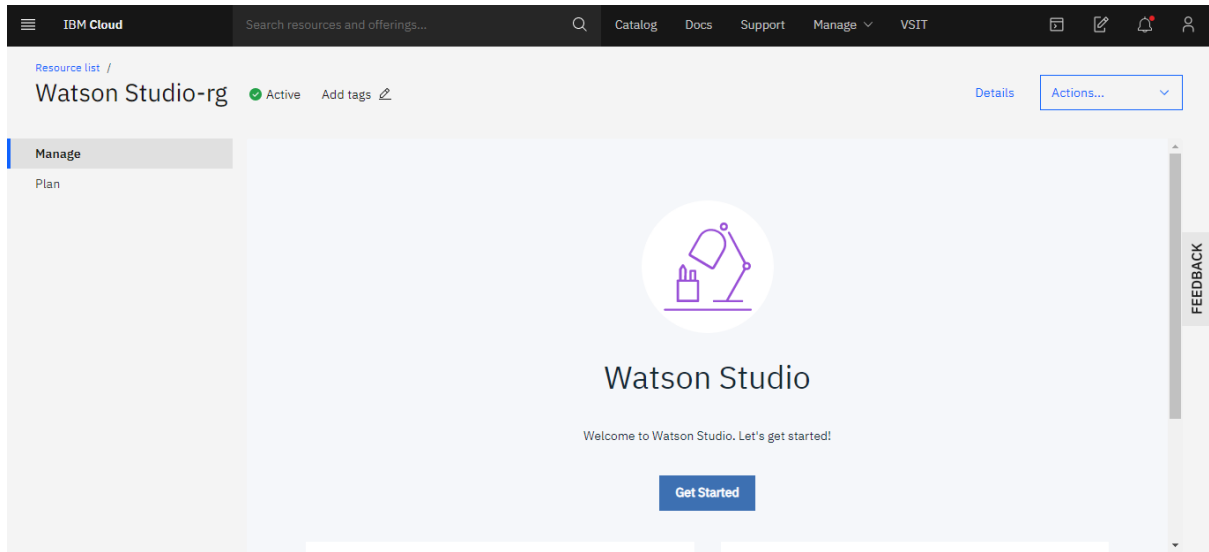
1.



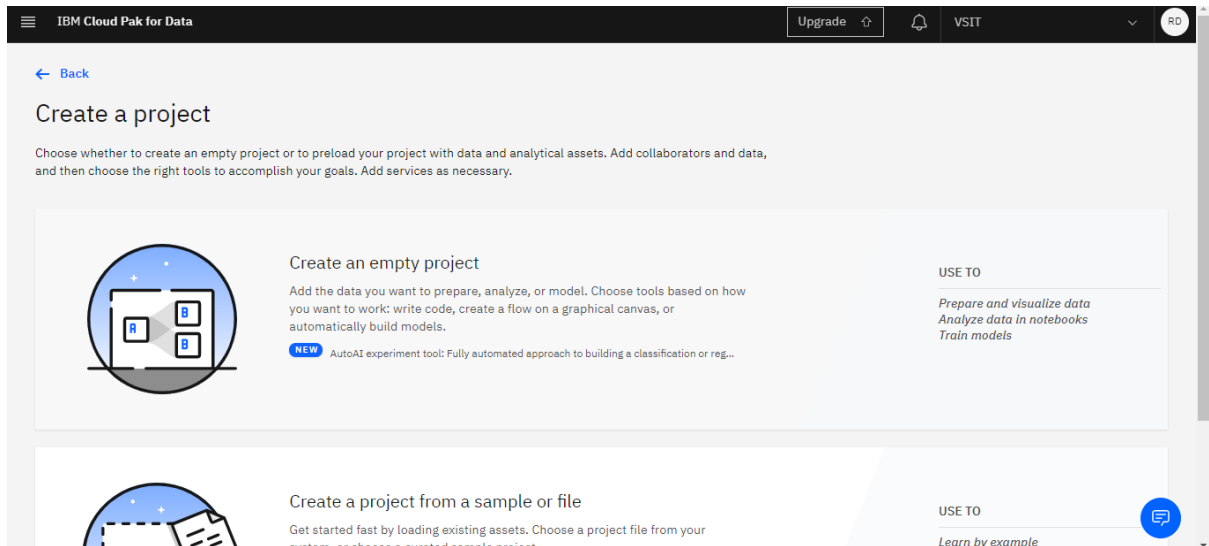
2.



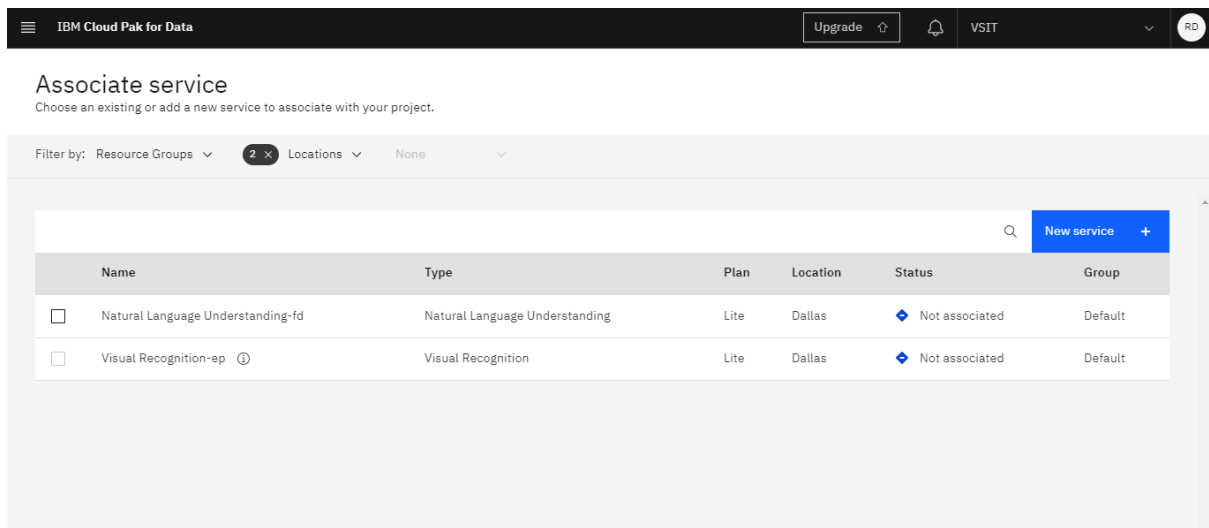
3.



4.



5.



6.

The screenshot shows the 'Classification of Employees' project overview in IBM Cloud Pak for Data. The page has a dark header with 'IBM Cloud Pak for Data' and navigation links like 'Upgrade', 'VSIT', and 'RD'. Below the header, there's a breadcrumb 'Projects / Classification of Employees' and a blue 'Add to project' button. The main content area is divided into two sections: 'Overview' on the left and 'Recent activity' on the right. The 'Overview' section includes details like 'Date created: Oct 14, 2020', 'Description: No description available', and 'Storage: 576.96 KB used Cloud Object Storage'. The 'Recent activity' section is currently empty, showing a placeholder for alerts. On the right side of the page, there are two large numbers: '3' for 'Assets' and '1' for 'Collaborators'. A blue chat bubble icon is visible in the bottom right corner.

7.

This screenshot shows the same 'Classification of Employees' project overview page, but with a 'Choose asset type' modal window open in the center. The modal lists various 'Available asset types' in a grid: 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, and Decision Optimization... (marked as 'NEW'). The background page is dimmed, showing the same overview details and asset/collaborator counts as in the previous screenshot.

8.

The screenshot displays the 'Visual Recognition' service catalog page. The page has a dark header with 'IBM Cloud Pak for Data' and navigation links. The main content area is titled 'Visual Recognition' and includes the author 'IBM' and the last update date 'Oct 14, 2020'. There are two tabs: 'Create' (active) and 'About'. Under the 'Create' tab, there's a 'Select a region' section with a dropdown menu currently set to 'Dallas'. Below that is a 'Pricing plan' section with a note: 'Displayed prices do not include tax. Monthly prices shown are for country or region: United States'. A table with columns 'Plan', 'Features', and 'Pricing' is partially visible. On the right side, there's a dark sidebar with a 'Summary' section containing details: 'Visual Recognition', 'Region: Dallas', 'Plan: Standard', 'Service name: Visual Recognition-ol', and 'Resource group: Default'. At the bottom of the sidebar is a blue 'Create' button and a link to 'View terms'.

9.

The screenshot shows the 'Custom Models' and 'Prebuilt Models' sections of the IBM Cloud Pak for Data interface. The top navigation bar includes 'Upgrade', 'VSIT', and a user profile 'RD'. The breadcrumb trail is 'Projects / Classification of Employees / 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
- 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.

10.

The screenshot shows the 'Projects' section of the IBM Cloud Pak for Data interface. The top navigation bar includes 'Upgrade', 'VSIT', and a user profile 'RD'. The breadcrumb trail is 'Projects'.

Search: Which project are you looking for? [New project +](#)

Filter: All my projects

Name	Role	Storage	Collaborators	Creator	Date created
Classification of Employees	Admin	COS		Rohini Desai	14 Oct 2020
Demographic-Impact-on-Sales	Admin	COS		Rohini Desai	5 Oct 2020

[Show more](#)

11.

The screenshot shows the 'Data assets' and 'Models' sections of the IBM Cloud Pak for Data interface. The top navigation bar includes 'Upgrade', 'VSIT', and a user profile 'RD'. The breadcrumb trail is 'Projects / Classification of Employees'.

[Add to project +](#)

Data assets

0 assets selected. [New data asset +](#)

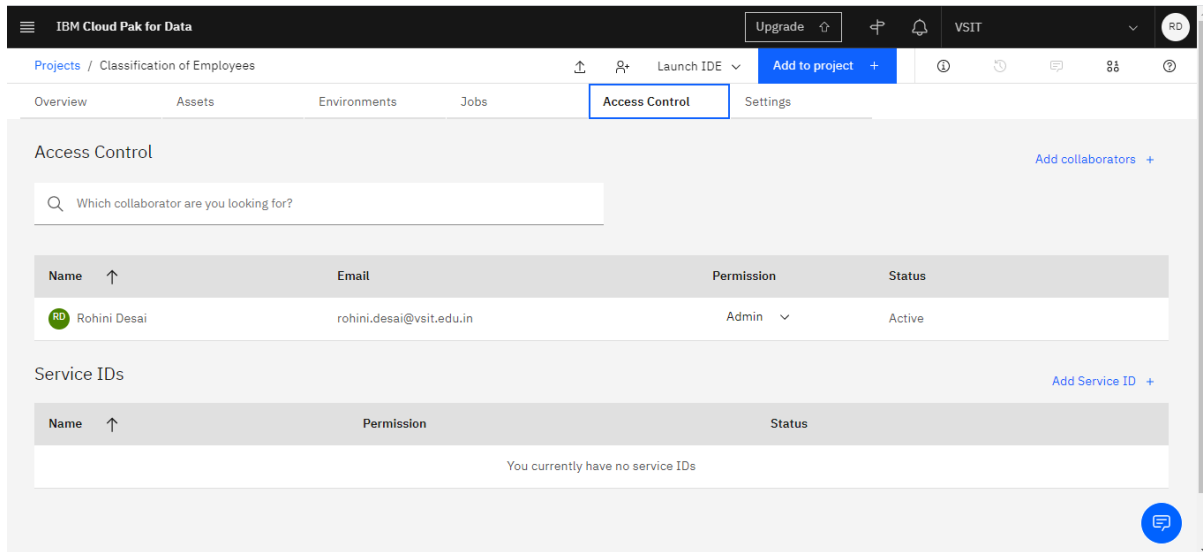
<input type="checkbox"/>	Name	Type	Created by	Last modified	
<input type="checkbox"/>	ZIP Man_without_helmet.zip	Data Asset	Rohini Desai	Oct 14, 2020, 11:01 PM	
<input type="checkbox"/>	ZIP Man with Helmet.zip	Data Asset	Rohini Desai	Oct 14, 2020, 11:00 PM	

Models

Visual Recognition models [New Visual Recognition models +](#)

Name	Model ID	Model type	Last modified	
Default Custom Model	Available upon training	Classification	Oct 17, 2020, 12:34 PM	
Classification of Employees	ClassificationofEmployees_1544345354	Classification	Oct 14, 2020, 11:12 PM	

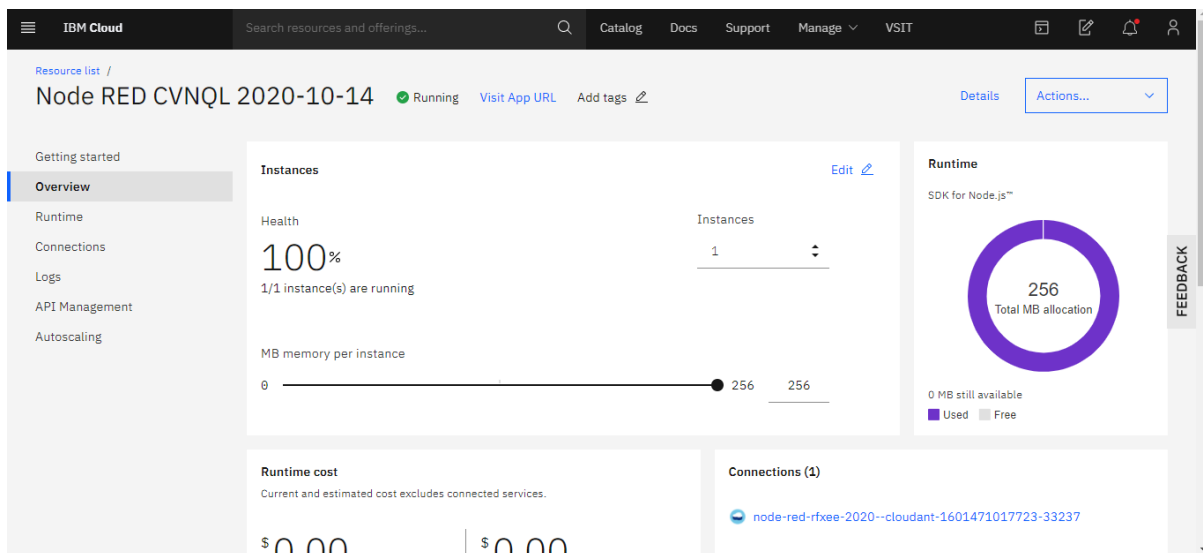
12.



The screenshot shows the 'Access Control' page in IBM Cloud Pak for Data. The page has a dark header with 'IBM Cloud Pak for Data' and navigation links like 'Upgrade', 'Launch IDE', and 'Add to project'. Below the header, there's a breadcrumb 'Projects / Classification of Employees' and tabs for 'Overview', 'Assets', 'Environments', 'Jobs', 'Access Control', and 'Settings'. The 'Access Control' tab is active. It features a search bar 'Which collaborator are you looking for?' and a table of collaborators. Below the table is a section for 'Service IDs' with a message 'You currently have no service IDs'.

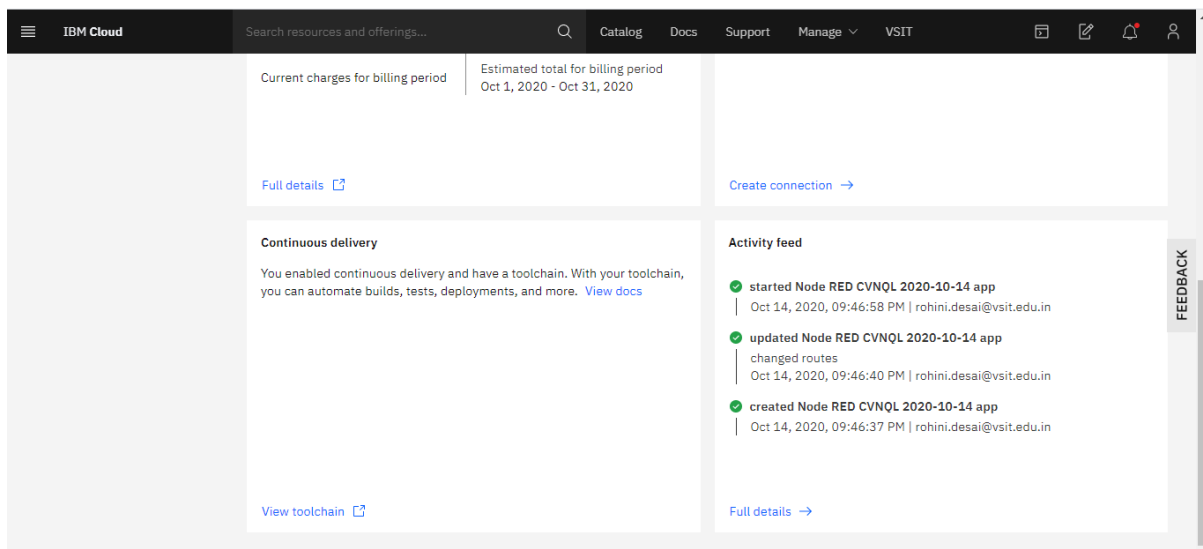
Name	Email	Permission	Status
Rohini Desai	rohini.desai@vsit.edu.in	Admin	Active

13.



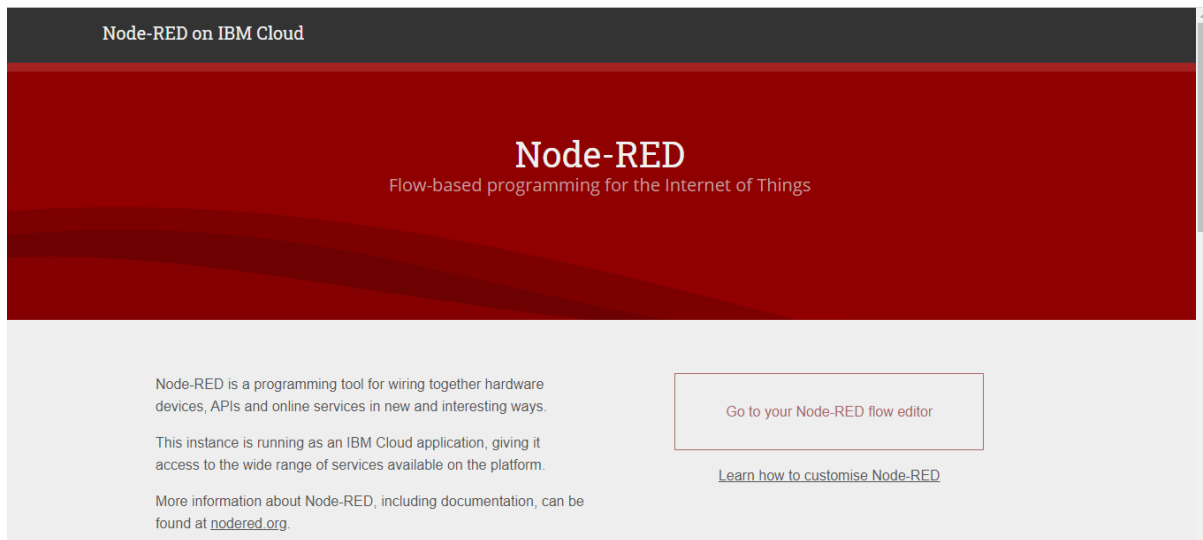
The screenshot shows the 'Node RED CVNQL 2020-10-14' overview page in IBM Cloud. The page has a dark header with 'IBM Cloud' and navigation links like 'Catalog', 'Docs', 'Support', 'Manage', and 'VSIT'. Below the header, there's a breadcrumb 'Resource list /' and the resource name 'Node RED CVNQL 2020-10-14' with a 'Running' status. The page is divided into several sections: 'Overview' (selected), 'Runtime', 'Connections', 'Logs', 'API Management', and 'Autoscaling'. The 'Overview' section shows 'Health' at 100%, 'Instances' at 1, and 'MB memory per instance' at 256. The 'Runtime' section shows a donut chart for 'Total MB allocation' at 256. The 'Connections' section shows a single connection 'node-red-rfxee-2020--cloudant-1601471017723-33237'.

14.

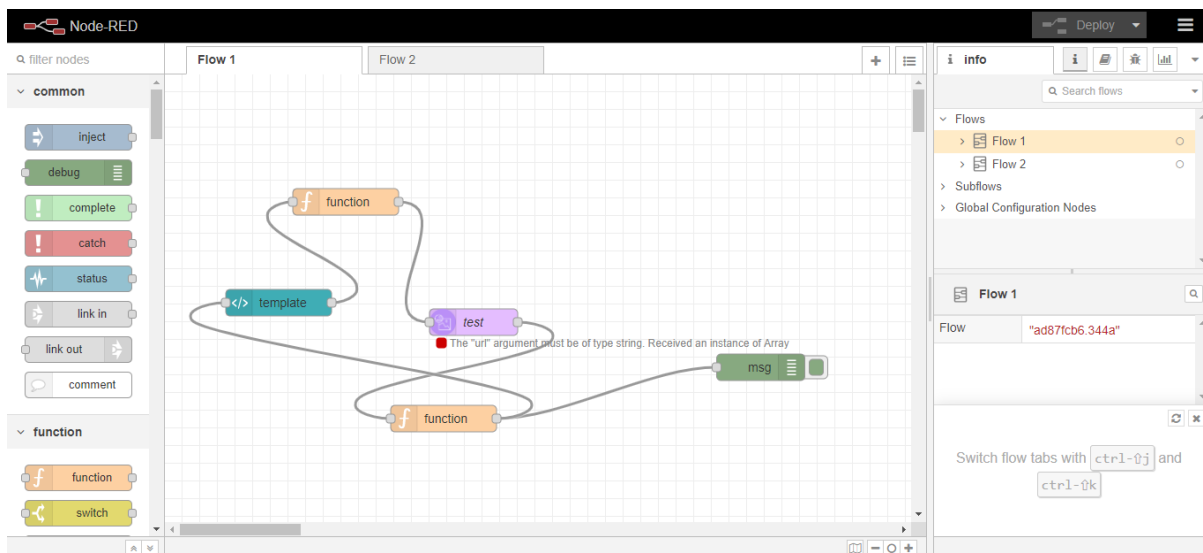


The screenshot shows the IBM Cloud billing and activity feed page. The page has a dark header with 'IBM Cloud' and navigation links like 'Catalog', 'Docs', 'Support', 'Manage', and 'VSIT'. Below the header, there's a breadcrumb 'Search resources and offerings...'. The page is divided into several sections: 'Current charges for billing period' (Oct 1, 2020 - Oct 31, 2020), 'Continuous delivery' (You enabled continuous delivery and have a toolchain. With your toolchain, you can automate builds, tests, deployments, and more. View docs), and 'Activity feed' (started Node RED CVNQL 2020-10-14 app, updated Node RED CVNQL 2020-10-14 app, created Node RED CVNQL 2020-10-14 app). The 'Activity feed' section shows a list of activities with timestamps and user information.

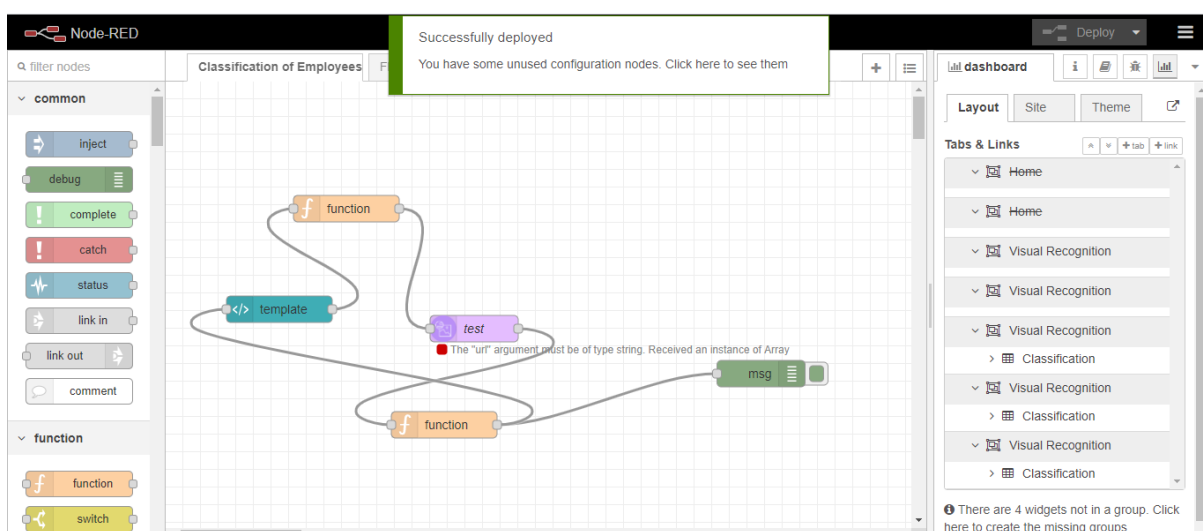
15.



16.



17.



18.

Visual Recognition

Classification

Classification using Visual Recognition

Choose file Browse

Selected Image

Submit

The Recognised classes

Class	Score
-------	-------


19. Output

Visual Recognition

Classification

Classification using Visual Recognition

Choose file Browse



Submit

The Recognised classes

Class	Score
Man_without_helmet	0.87

20. Output

Classification using Visual Recognition

Choose file

Browse



Submit

The Recognised classes

Class	Score
Man with Helmet	0.886

21.

Classification using Visual Recognition

Choose file

Browse



Submit

The Recognised classes

Class	Score
Man_without_helmet	0.92

22.

Visual Recognition

Classification using Visual Recognition

Choose file

Browse



Submit

The Recognised classes

Class	Score
Man_without_helmet	0.916