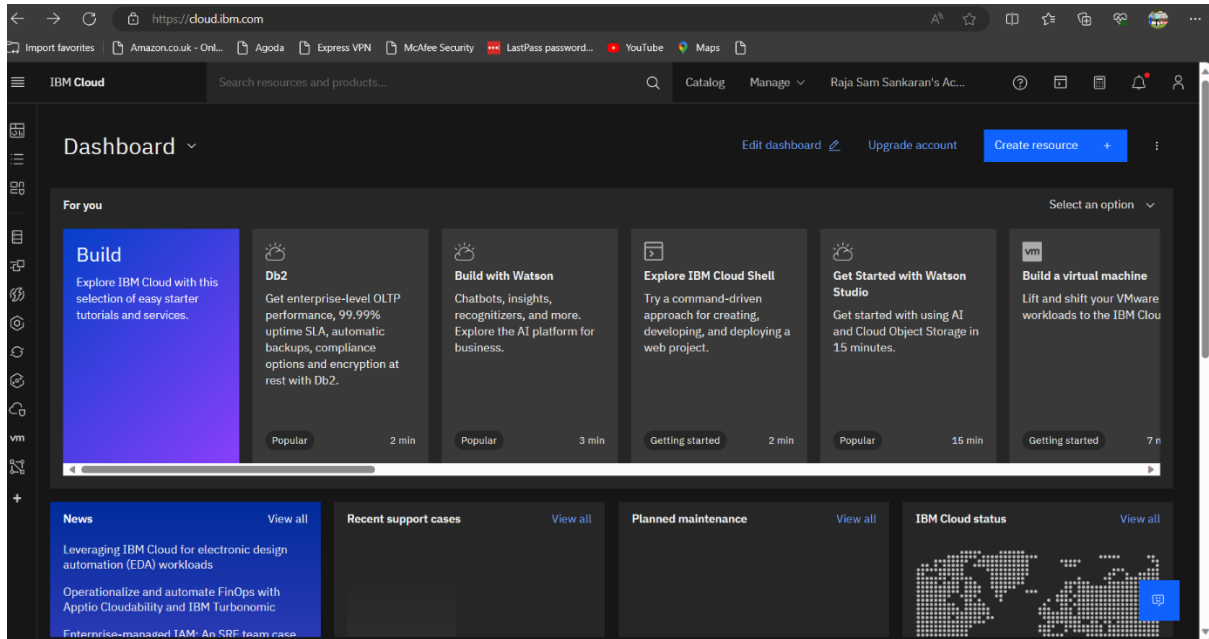


Image Recognition with IBM Cloud Visual Recognition

PHASE 4: DEVELOPMENT PART 2:

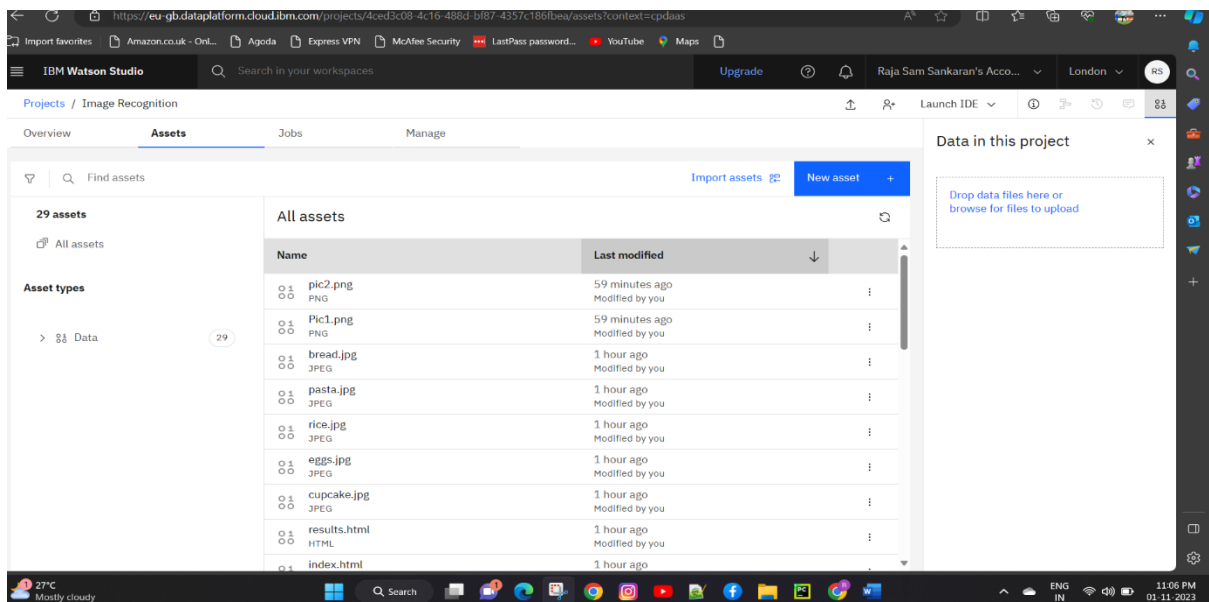
Sign up for IBM Cloud:

If you don't already have an IBM Cloud account, you'll need to sign up for one. You can do this at IBM Cloud's website.



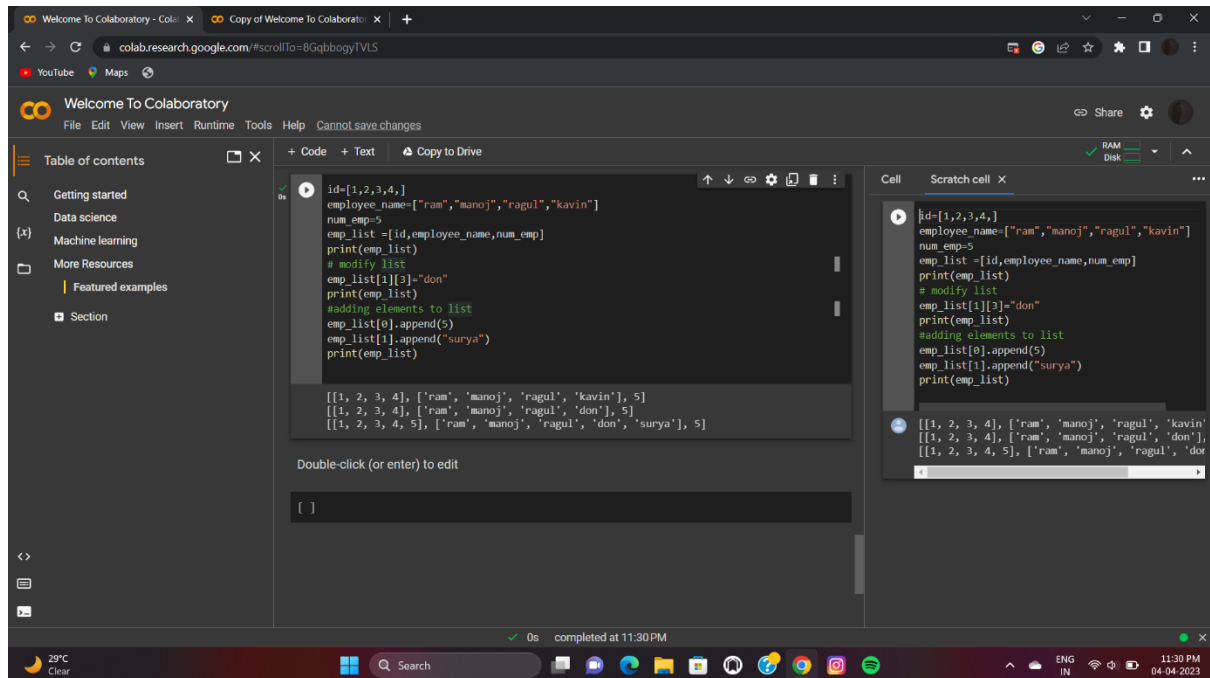
Create a Visual Recognition Service:

Once you have an IBM Cloud account, log in and create a Visual Recognition service instance. You can do this from the IBM Cloud dashboard by navigating to the "Create Resource" section and searching for "Visual Recognition."



Get API Credentials:

After creating a Visual Recognition service instance, you'll receive API credentials (API Key and URL) that you'll use to authenticate and interact with the service.



The screenshot shows the Google Colaboratory web interface. The left sidebar contains a 'Table of contents' with links to 'Getting started', 'Data science', 'Machine learning', and 'More Resources'. The main area is split into two panes. The left pane shows a code cell with the following Python code:

```
id=[1,2,3,4,]
employee_name=["ram","manoj","ragul","kavin"]
num_emp=5
emp_list=[id,employee_name,num_emp]
print(emp_list)
# modify list
emp_list[1][3]="don"
print(emp_list)
#adding elements to list
emp_list[0].append(5)
emp_list[1].append("surya")
print(emp_list)
```

Below the code, the output is displayed as a list of lists:

```
[[1, 2, 3, 4], ['ram', 'manoj', 'ragul', 'kavin'], 5]
[[1, 2, 3, 4], ['ram', 'manoj', 'ragul', 'don'], 5]
[[1, 2, 3, 4, 5], ['ram', 'manoj', 'ragul', 'don', 'surya'], 5]
```

The right pane shows a 'Scratch cell' with the same code, but with comments added to explain the steps: '# modify list', '#adding elements to list', and '#adding elements to list'. The output of the scratch cell is also shown, matching the main code's output.

Collect and Organize Your Data:

Gather a substantial amount of labeled image data that you want to use to train and test your image recognition model. The quality and diversity of your dataset are crucial for the success of your model.

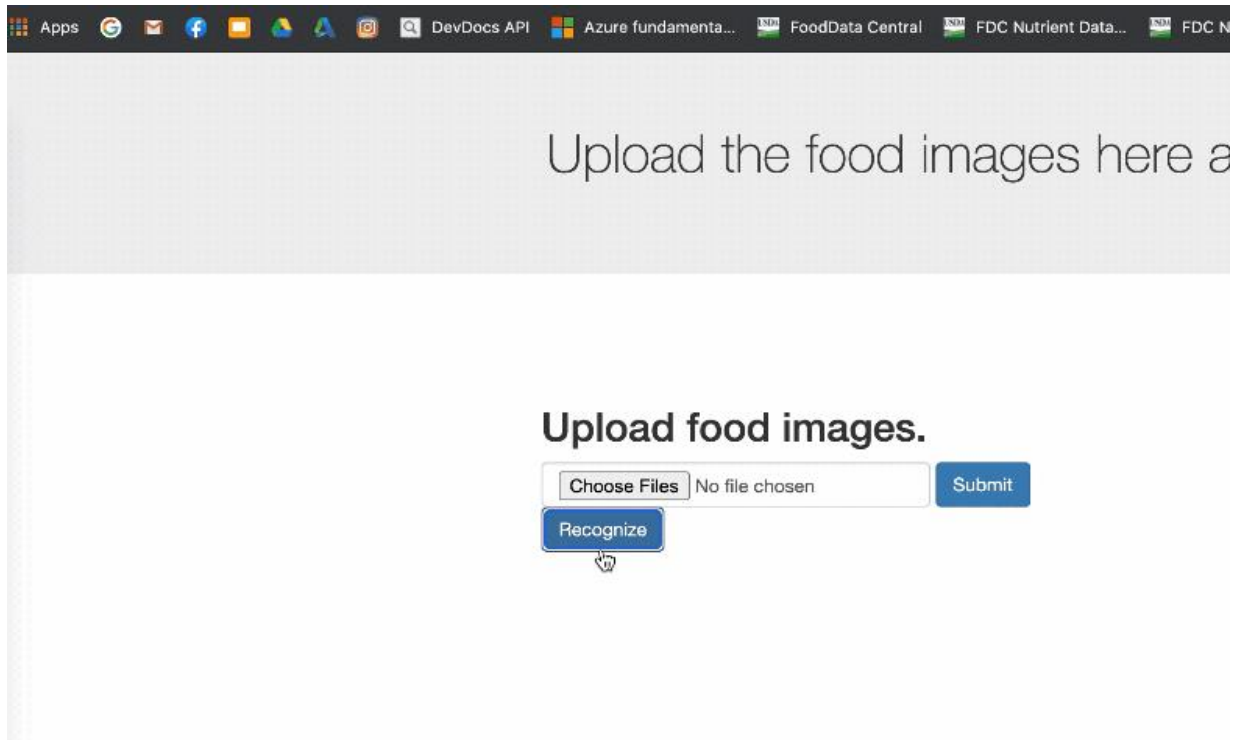


Train Your Model:

Upload your image dataset to the Visual Recognition service and use it to train a custom model. The service allows you to create and fine-tune models for specific recognition tasks.

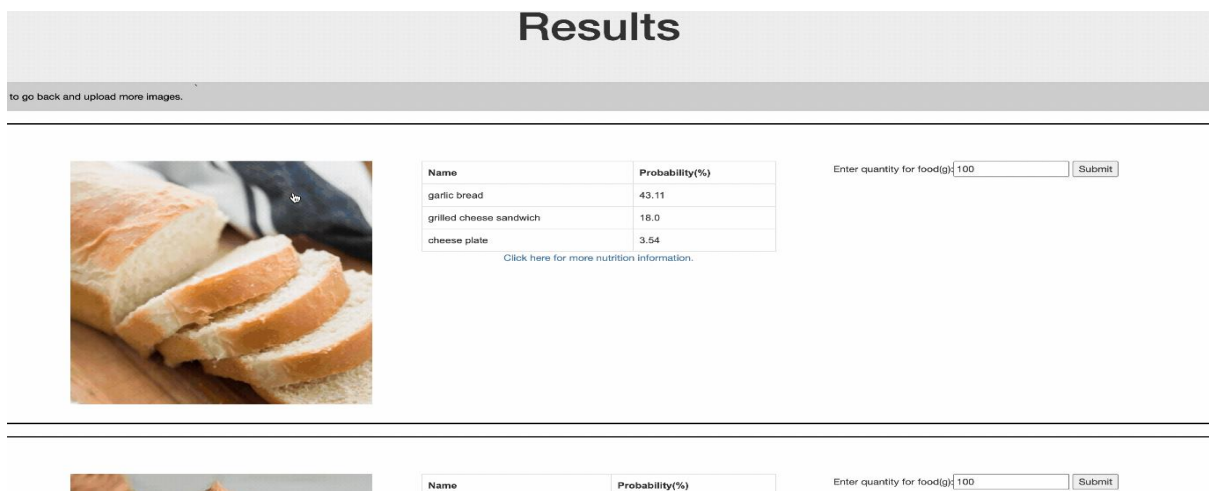
Test Your Model:

After training, evaluate your model's performance by testing it with images it has never seen before. This helps you understand its accuracy and identify areas where it may need improvement.



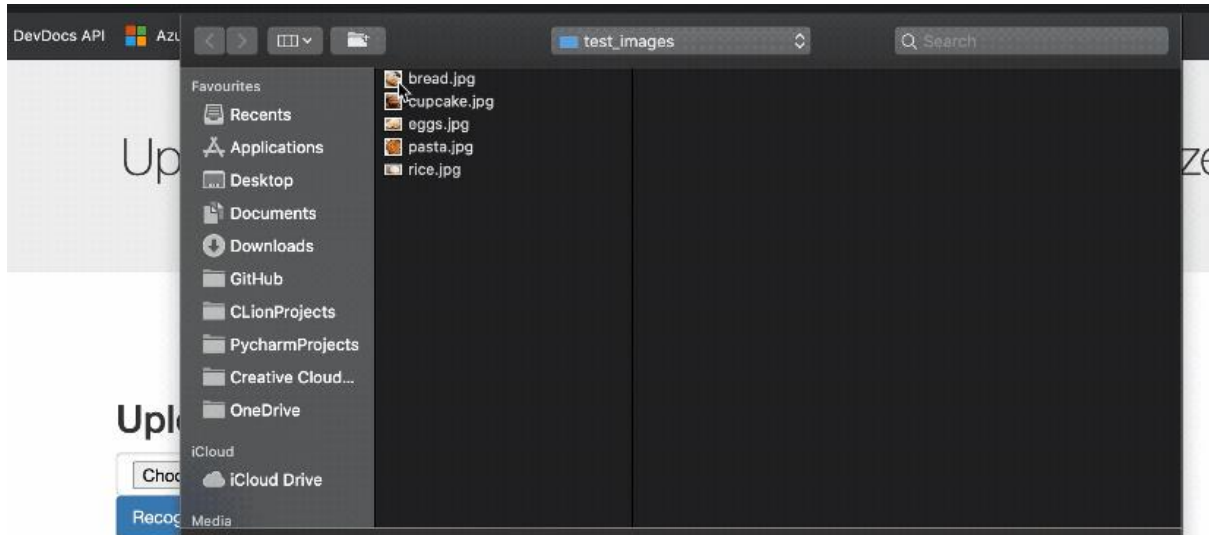
Integrate with Your Application:

Once you're satisfied with your model's performance, you can integrate it into your application using the API credentials. IBM provides SDKs and documentation to help you with the integration process.



Continuous Improvement:

Image recognition models can benefit from ongoing training and refinement. Regularly update your model with new data to improve its accuracy over time.



Implement Error Handling and Monitoring:

Be prepared to handle errors and exceptions that may occur when making API calls. Implement monitoring and logging to keep track of how your model is performing in your application.

Scaling and Deployment:

Depending on your application's requirements, you may need to scale your deployment to handle more users and images. IBM Cloud provides tools to help you scale your services as needed.



Name	Probability(%)
cup cakes	98.92
ravioli	0.26
chocolate mousse	0.11

[Click here for more nutrition information.](#)

Enter quantity for food(g):