

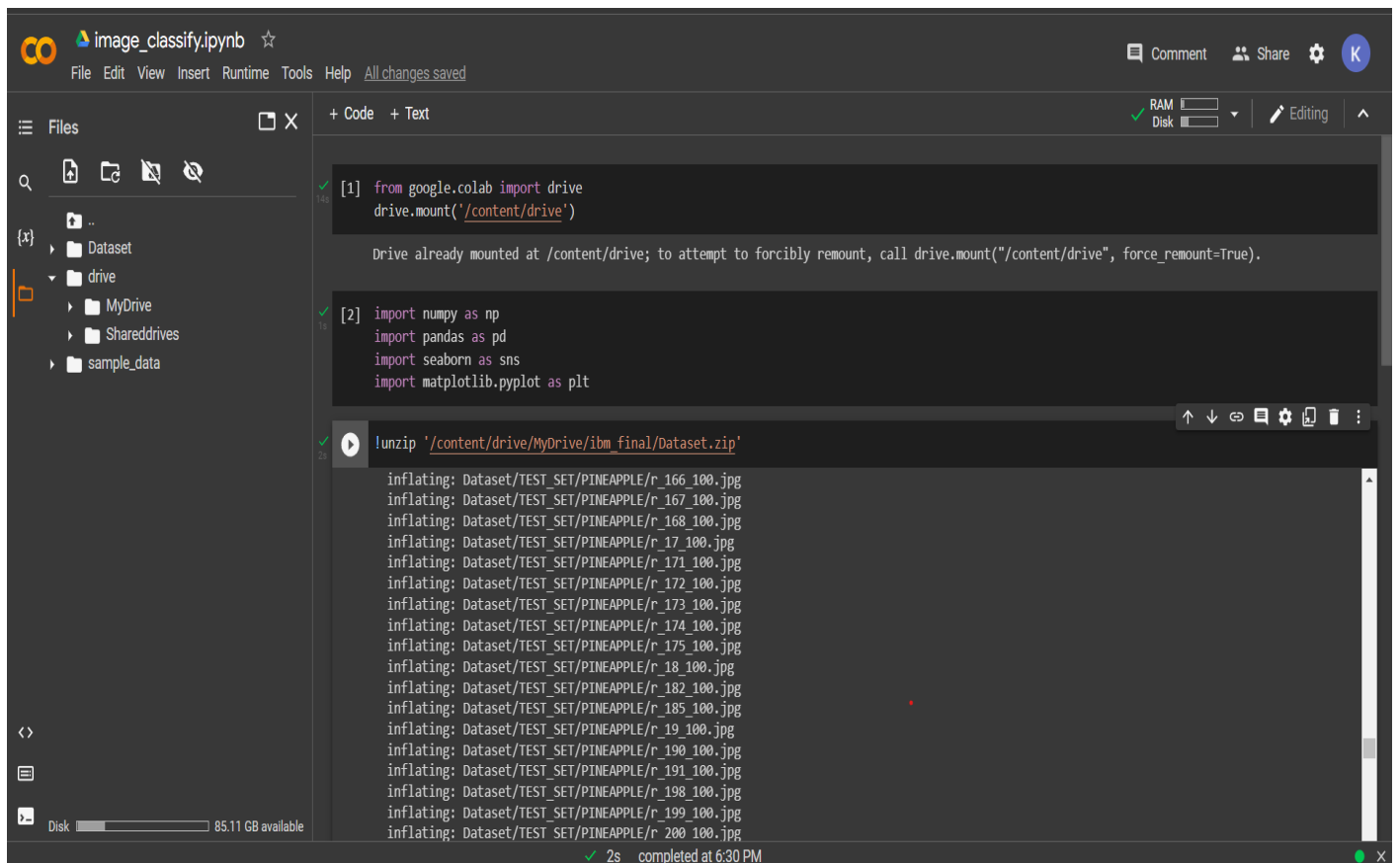
Project Development Phase

Sprint 1

Date	09 November 2022
Team ID	PNT2022TMID21516
Project Name	AI-powered Nutrition Analyzer for Fitness Enthusiasts

DATA COLLECTION:

Download the dataset and upload it in jupyter notebook



The screenshot shows a Jupyter Notebook titled 'image_classify.ipynb'. The left sidebar displays a file explorer with a tree view containing folders like 'Dataset', 'drive', 'MyDrive', 'Shareddrives', and 'sample_data'. The main area contains three code cells. The first cell mounts Google Drive. The second cell imports necessary libraries. The third cell unzips a dataset file, with the output showing a list of image files being inflated.

```
[1] from google.colab import drive
drive.mount('/content/drive')

Drive already mounted at /content/drive; to attempt to forcibly remount, call drive.mount("/content/drive", force_remount=True).

[2] import numpy as np
import pandas as pd
import seaborn as sns
import matplotlib.pyplot as plt

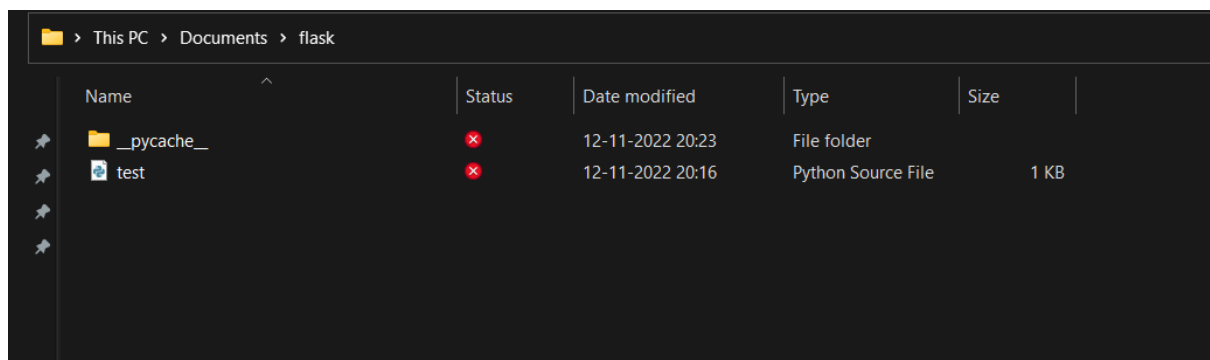
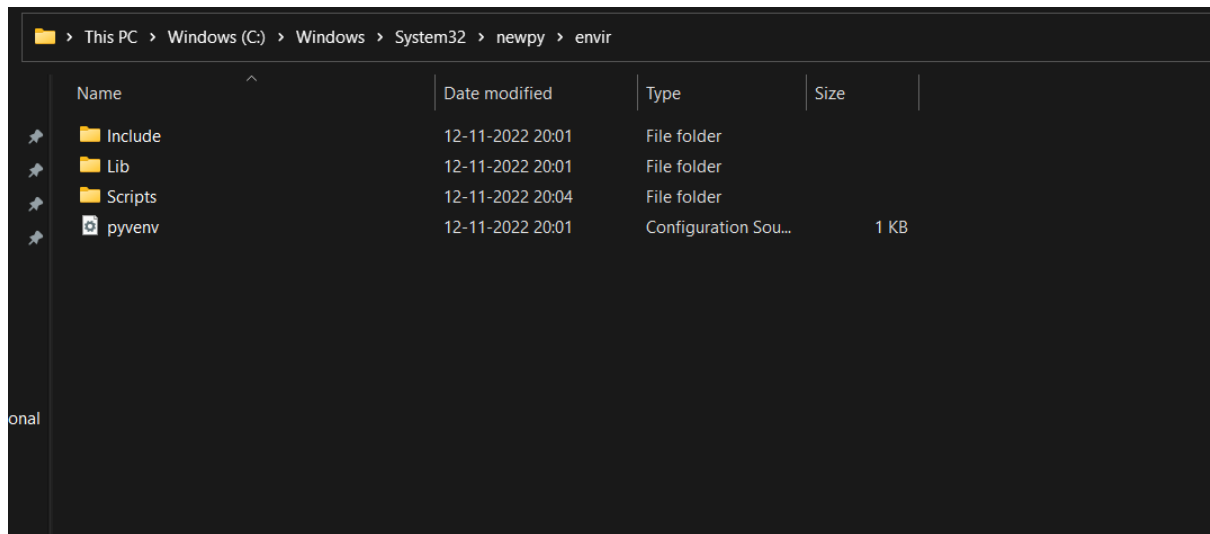
!unzip '/content/drive/MyDrive/ibm_final/Dataset.zip'

inflating: Dataset/TEST_SET/PINEAPPLE/r_166_100.jpg
inflating: Dataset/TEST_SET/PINEAPPLE/r_167_100.jpg
inflating: Dataset/TEST_SET/PINEAPPLE/r_168_100.jpg
inflating: Dataset/TEST_SET/PINEAPPLE/r_17_100.jpg
inflating: Dataset/TEST_SET/PINEAPPLE/r_171_100.jpg
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inflating: Dataset/TEST_SET/PINEAPPLE/r_18_100.jpg
inflating: Dataset/TEST_SET/PINEAPPLE/r_182_100.jpg
inflating: Dataset/TEST_SET/PINEAPPLE/r_185_100.jpg
inflating: Dataset/TEST_SET/PINEAPPLE/r_19_100.jpg
inflating: Dataset/TEST_SET/PINEAPPLE/r_190_100.jpg
inflating: Dataset/TEST_SET/PINEAPPLE/r_191_100.jpg
inflating: Dataset/TEST_SET/PINEAPPLE/r_198_100.jpg
inflating: Dataset/TEST_SET/PINEAPPLE/r_199_100.jpg
inflating: Dataset/TEST_SET/PINEAPPLE/r_200_100.jpg

2s completed at 6:30 PM
```

SOFTWARE REQUIREMENTS:

In our project , we need to download flask application to run the application



Install a new virtualenv :

```
C:\Windows\System32>py -2 -m pip install virtualenv
Collecting virtualenv
  Downloading virtualenv-20.16.6-py3-none-any.whl (8.8 MB)
    ----- 8.8/8.8 MB 77.6 kB/s eta 0:00:00
Collecting distlib<1,>=0.3.6
  Downloading distlib-0.3.6-py2.py3-none-any.whl (468 kB)
    ----- 468.5/468.5 kB 168.6 kB/s eta 0:00:00
Collecting filelock<4,>=3.4.1
  Downloading filelock-3.8.0-py3-none-any.whl (10 kB)
Collecting platformdirs<3,>=2.4
  Downloading platformdirs-2.5.3-py3-none-any.whl (14 kB)
Installing collected packages: distlib, platformdirs, filelock, virtualenv
  WARNING: The script virtualenv.exe is installed in 'C:\Users\ammuv\AppData\Local\Programs\Python\Python311\Scripts' which is not on PATH.
  Consider adding this directory to PATH or, if you prefer to suppress this warning, use --no-warn-script-location.
Successfully installed distlib-0.3.6 filelock-3.8.0 platformdirs-2.5.3 virtualenv-20.16.6

[notice] A new release of pip available: 22.3 -> 22.3.1
[notice] To update, run: C:\Users\ammuv\AppData\Local\Programs\Python\Python311\python.exe -m pip install --upgrade pip
```

Create a new directory and go to that dir :

```
C:\Windows\System32>mkdir newpy

C:\Windows\System32>cd newpy
```

Go to Directory :

```
C:\Windows\System32\newpy>dir *newpy*
Volume in drive C is Windows
Volume Serial Number is A264-B494

Directory of C:\Windows\System32\newpy

File Not Found
```

Activate the environment :

Install the flask application : using pip

```
C:\Windows\System32\newpy>envr\Scripts\activate

(envr) C:\Windows\System32\newpy>pip install flask
Collecting flask
  Downloading Flask-2.2.2-py3-none-any.whl (101 kB)
----- 101.5/101.5 kB 121.6 kB/s eta 0:00:00
Collecting Werkzeug>=2.2.2
  Downloading Werkzeug-2.2.2-py3-none-any.whl (232 kB)
----- 232.7/232.7 kB 182.6 kB/s eta 0:00:00
Collecting Jinja2>=3.0
  Downloading Jinja2-3.1.2-py3-none-any.whl (133 kB)
----- 133.1/133.1 kB 135.6 kB/s eta 0:00:00
Collecting itsdangerous>=2.0
  Downloading itsdangerous-2.1.2-py3-none-any.whl (15 kB)
Collecting click>=8.0
  Downloading click-8.1.3-py3-none-any.whl (96 kB)
----- 96.6/96.6 kB 153.4 kB/s eta 0:00:00
Collecting colorama
  Downloading colorama-0.4.6-py2.py3-none-any.whl (25 kB)
Collecting MarkupSafe>=2.0
  Downloading MarkupSafe-2.1.1.tar.gz (18 kB)
  Preparing metadata (setup.py) ... done
Installing collected packages: MarkupSafe, itsdangerous, colorama, Werkzeug, Jinja2, click, flask
DEPRECATION: MarkupSafe is being installed using the legacy 'setup.py install' method, because it does not have a
change. A possible replacement is to enable the '--use-pep517' option. Discussion can be found at https://github.com
Running setup.py install for MarkupSafe ... done
Successfully installed Jinja2-3.1.2 MarkupSafe-2.1.1 Werkzeug-2.2.2 click-8.1.3 colorama-0.4.6 flask-2.2.2 itsdange

[notice] A new release of pip available: 22.3 -> 22.3.1
[notice] To update, run: python.exe -m pip install --upgrade pip
```

Python file – test.py :

```
test - Notepad

File Edit View

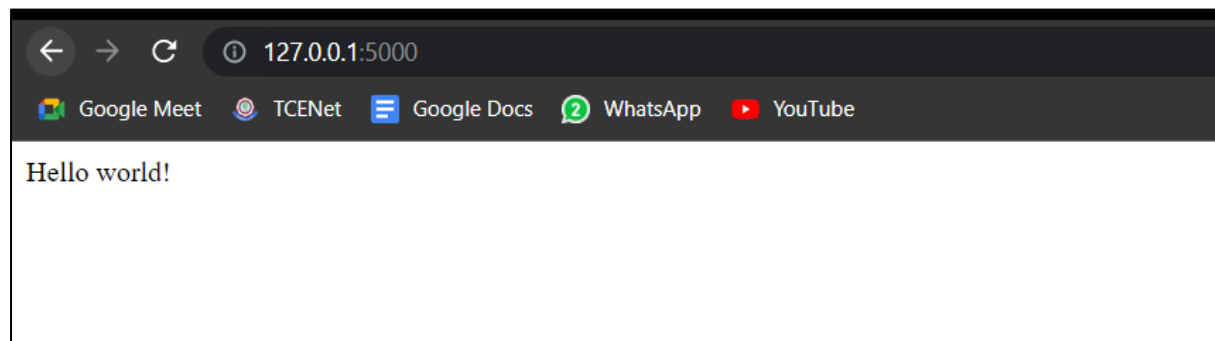
from flask import Flask
app = Flask(__name__)
@app.route('/')
def hello_world():
    return 'Hello world!'
```

Here , we have created sample hello world web application :

Set flask application path :

```
(envir) C:\Users\ammuv\OneDrive\Documents\flask>set FLASK_APP=test.py

(envir) C:\Users\ammuv\OneDrive\Documents\flask>python -m flask run
* Serving Flask app 'test.py'
* Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on http://127.0.0.1:5000
Press CTRL+C to quit
127.0.0.1 - - [12/Nov/2022 20:24:15] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [12/Nov/2022 20:24:15] "GET /favicon.ico HTTP/1.1" 404 -
```

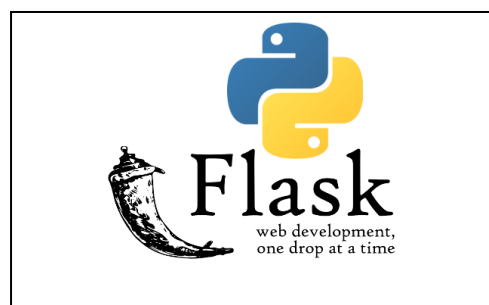


PRE-REQUISITES FOR MODEL BUILDING:

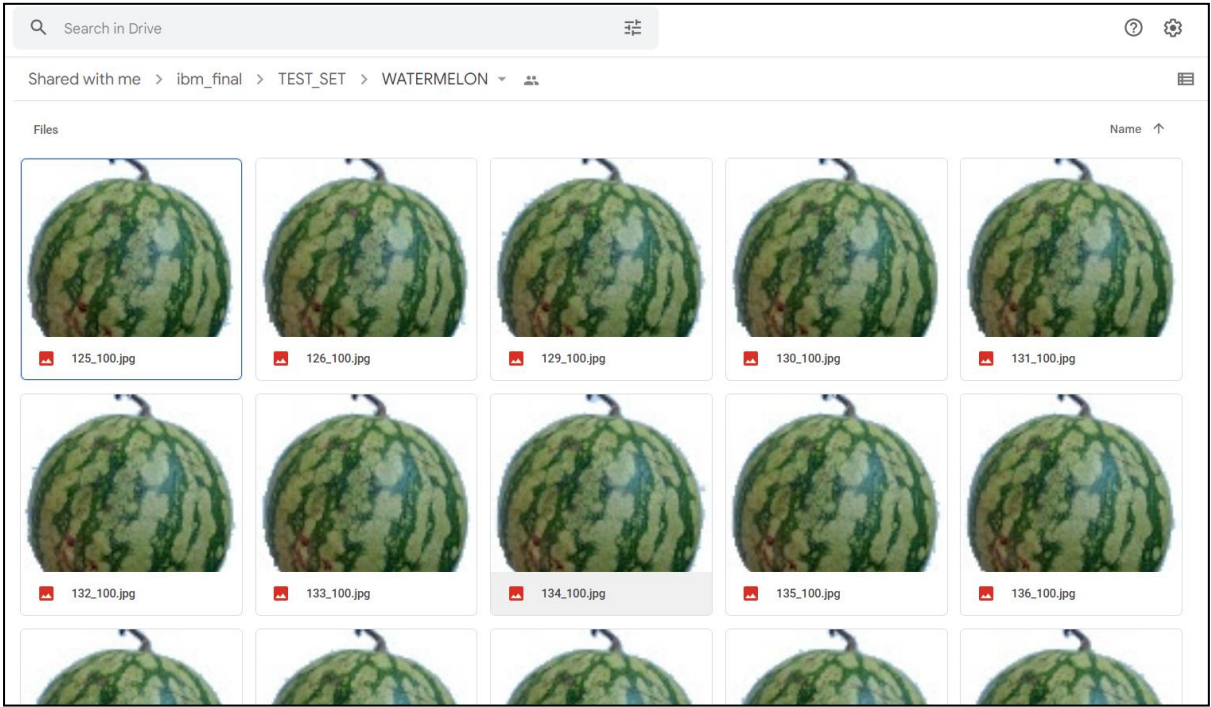
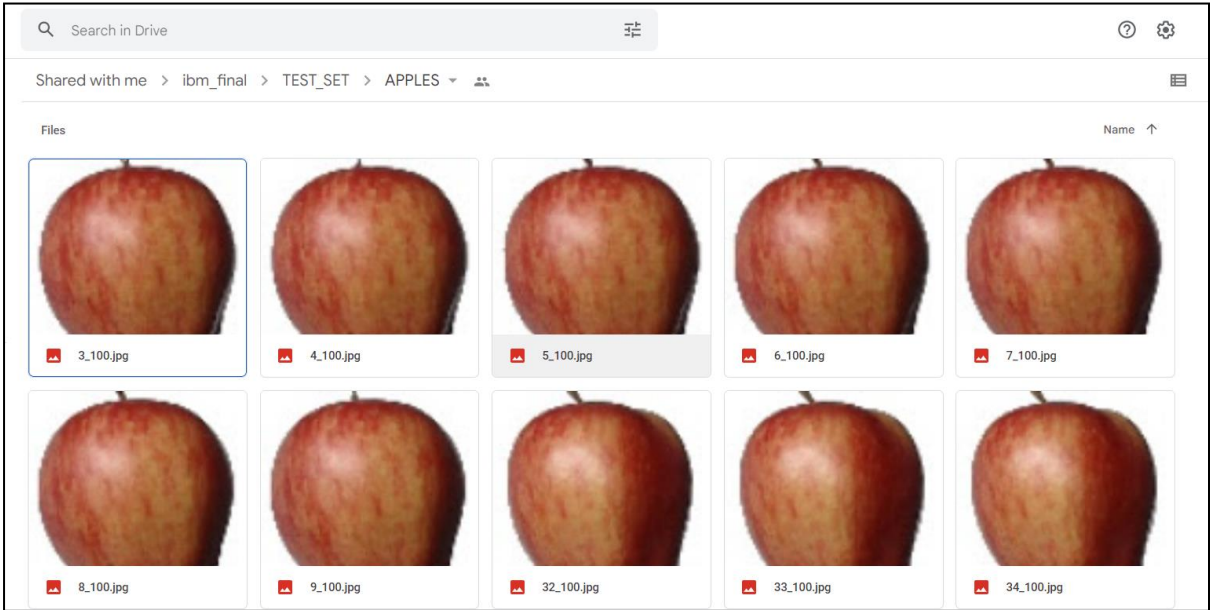
1. Python:

```
Python 3.10 (64-bit)
Python 3.10.4 (tags/v3.10.4:9d38120, Mar 23 2022, 23:13:41) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> # This program prints Hello, world!
>>>
>>> print('Hello, world!')
Hello, world!
>>> _
```

2. Flask python framework:



3. Dataset of our project:



And other software requirements.