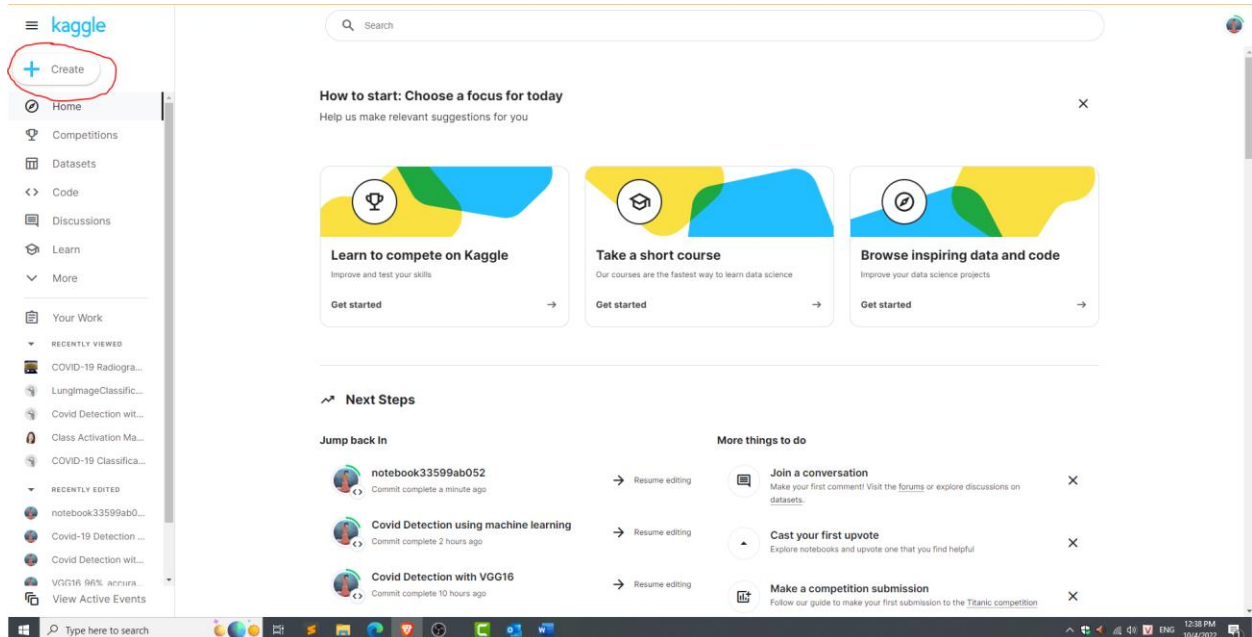


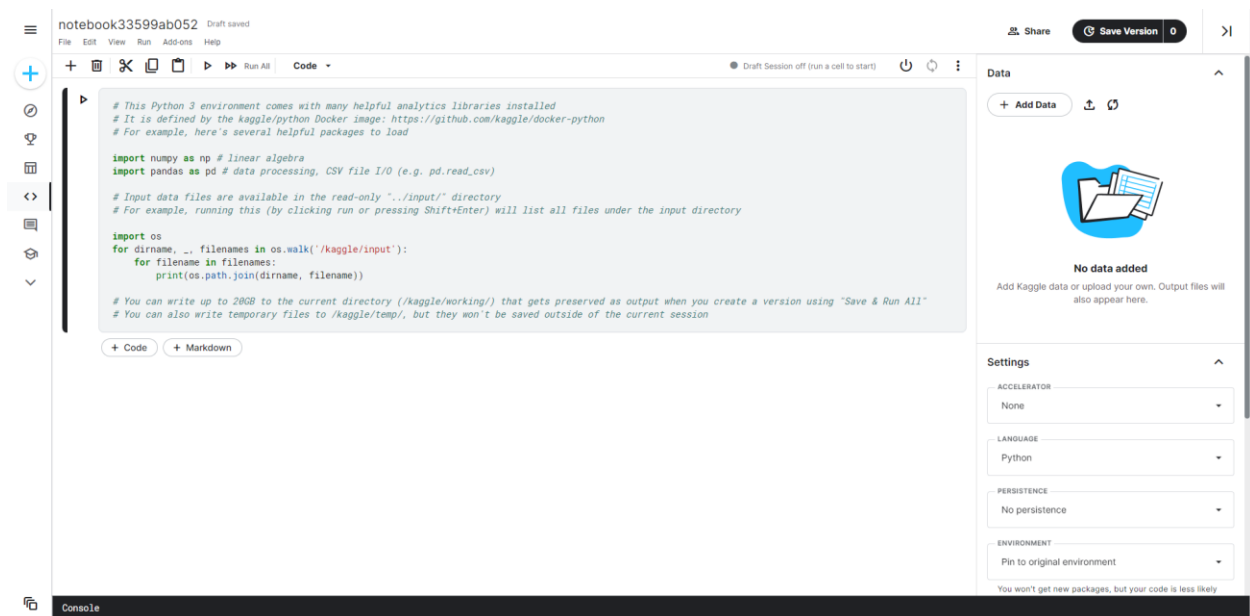
HƯỚNG DẪN CÀI ĐẶT CODE

1/ Truy cập vào <https://www.kaggle.com/> để đăng kí hoặc đăng nhập tài khoản.

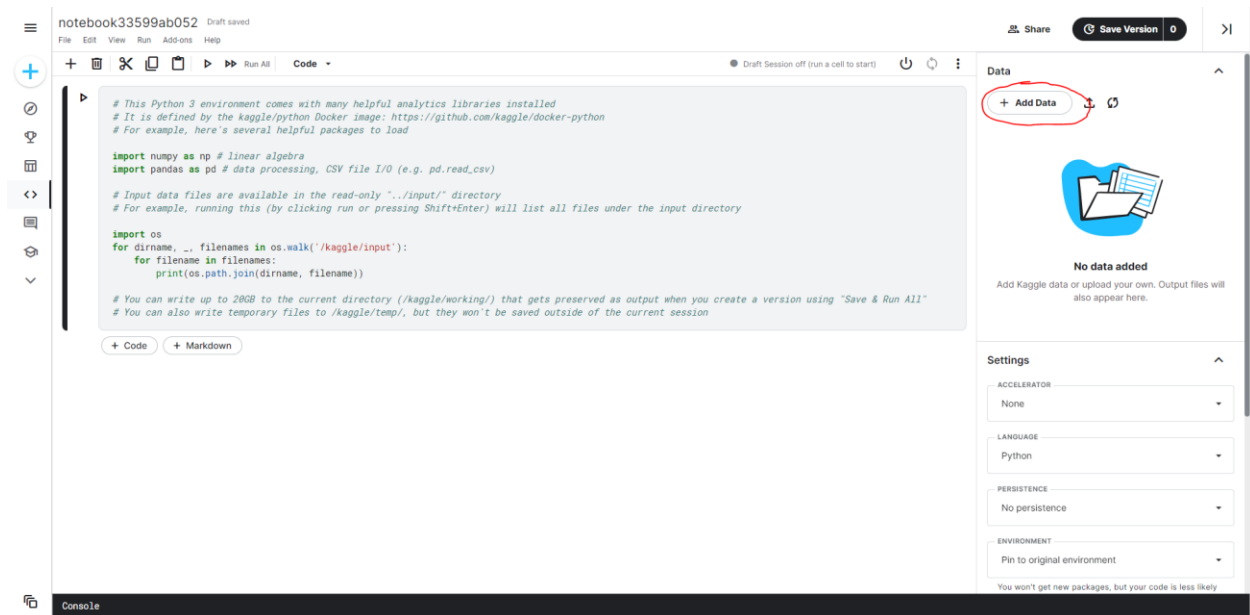
2/ Ở dashboard của trang chủ, chọn Create → New Notebook.



Màn hình chuyển sang giao diện của Kaggle Notebook.



3/ Chọn Dataset. Nhấn vào “Add Data” → Search “COVID-19 Radiography Database” và chọn bộ dataset như hình dưới (ấn dấu cộng).



The screenshot displays a Kaggle Notebook environment. The main area contains a code cell with the following Python code:

```
# This Python 3 environment comes with many helpful analytics libraries installed
# It is defined by the kaggle/python Docker image: https://github.com/kaggle/docker-python
# For example, here's several helpful packages to load

import numpy as np # linear algebra
import pandas as pd # data processing, CSV file I/O (e.g. pd.read_csv)

# Input data files are available in the read-only "../input/" directory
# For example, running this (by clicking run or pressing Shift+Enter) will list all files under the input directory

import os
for dirname, _, filenames in os.walk('/kaggle/input'):
    for filename in filenames:
        print(os.path.join(dirname, filename))

# You can write up to 20GB to the current directory (/kaggle/working/) that gets preserved as output when you create a version using "Save & Run All"
# You can also write temporary files to /kaggle/temp/, but they won't be saved outside of the current session
```

Below the code cell are buttons for "+ Code" and "+ Markdown". On the right side, the "Data" panel is visible, featuring a red circle around the "+ Add Data" button. Below this button is an icon of a folder and the text "No data added". Further down, the "Settings" panel is shown with dropdown menus for "ACCELERATOR" (set to None), "LANGUAGE" (set to Python), "PERSISTENCE" (set to No persistence), and "ENVIRONMENT" (set to Pin to original environment). At the bottom of the settings panel, a note states: "You won't get new packages, but your code is less likely".

Add Data



COVID-19 Radiography Database



Your Datasets

Competition Datasets

CSV

Your Notebooks

174 Data Sources

Relevance ▾



COVID-19 Radiography Database

Tawsifur Rahman · Updated 6mo ago

751 Upvotes · other · 816 MB



COVID-19 Radiography Databas...

Updated 1y ago

8 Upvotes



Detection of Covid Positive Cas...

Updated 7mo ago

70 Upvotes



COVIDx CXR-2

Andy Zhao · Updated 4mo ago

146 Upvotes · other · 14 GB



COVID 19 Detection - Pytorch T...

Updated 2Y ago

52 Upvotes



X_Ray covid19 95%

Updated 2Y ago

17 Upvotes



4/ Upload Notebook. Chọn File → Import Notebook → Kéo thả hoặc chọn file Notebook trong thư mục Code → Import.

5/ Ở phần Setting, mục Accelerator → chọn GPU.

The screenshot displays a Google Colab notebook titled "notebook33599ab052". The main content area shows a markdown cell titled "VGG16 model to detect COVID-19 using Chest x-ray images." with the following text:

Exploratory Data Analysis

I will be using the VGG16 model to detect Chest x-ray images that match with Chest x-ray images COVID-19.

List of classes of chest X-ray images given in the dataset

- Normal pneumonia.
- COVID-19.
- Viral pneumonia chest.
- Lung Opacity (Non-COVID lung infection).

VGG16 is a convolutional neural network that is 16 layers deep. VGG16 has convolution layers of 3×3 filter with a stride 1 and always used same padding and maxpool layer of 2×2 filter of stride 2. It follows this arrangement of convolution and max pool layers consistently throughout the whole architecture. In the end it has 2 FC (fully connected layers) followed by a softmax for output. The 16 in VGG16 refers to it has 16 layers that have weights. This network is a pretty large network and it has about 138 million (approx) parameters.

The diagram illustrates the VGG16 architecture with the following layers and dimensions:

- Input: $224 \times 224 \times 3$
- Layer 1: $224 \times 224 \times 64$
- Layer 2: $112 \times 112 \times 128$
- Layer 3: $56 \times 56 \times 256$
- Layer 4: $28 \times 28 \times 512$
- Layer 5: $14 \times 14 \times 512$
- Layer 6: $7 \times 7 \times 512$
- Layer 7: $1 \times 1 \times 4096$
- Layer 8: $1 \times 1 \times 1000$

Legend:

- convolution+ReLU
- max pooling
- fully connected+ReLU

The right sidebar shows the "Settings" panel with the "Accelerator" dropdown menu highlighted in red, set to "None". Other settings include "Language" (Python), "Persistence" (No persistence), "Environment" (Pin to original environment), "Internet" (Internet on), and "Tags" (Add Tags).

6/ Sau khi hoàn tất cài đặt thì bắt đầu chạy Code.