Programming Assignment - 1: Building a Machine Learning Application with Streamlit

ITBIN-2110-0159 - Nimantha Colambage

About model

It is a trained machine learning model for classifying images of flowers into categories such as daisy, dandelion, rose, sunflower, and tulip. The model is saved in a file, as are similar images for each category. Indeed, it predicts the type of flower in a photo user upload and can display images of similar flowers from its dataset. This helps provide a visual reference for the predicted category of flowers. Use kaagle free data set by connecting kaagle api

How this model run

the model file cant upload to github becouse its says too largo to upload so i upload the model to dropbox and save the streamlit app file code inside github and run it

Links

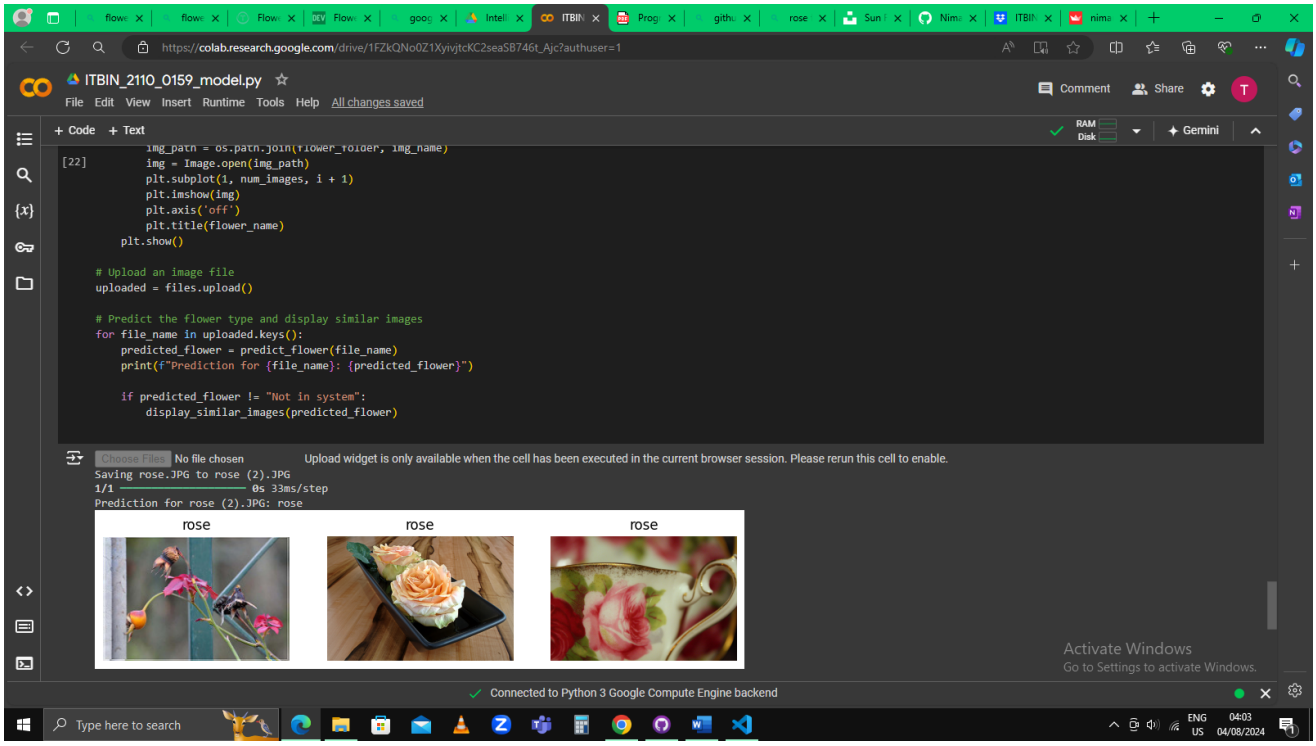
dropbox .h5 model file location https://www.dropbox.com/scl/fi/t527snher97bzrw4g1tas/flower_model.h5?rlkey=d3ltlw10hnso9qlfnefrnckdd&st=zh062pwk&dl=0
github link https://github.com/Nimantha-10/ITBIN_2110_0159.git
Streamlit app link https://itbin21100159-mpwpkmrjughp5edypucfy6.streamlit.app

Model Run

Model create using colab and when user upload image it predicts flower name also output similar flowers photos that inside that data set if that flower not in that data set output not in system.

Only get 5 flowers for training

Example

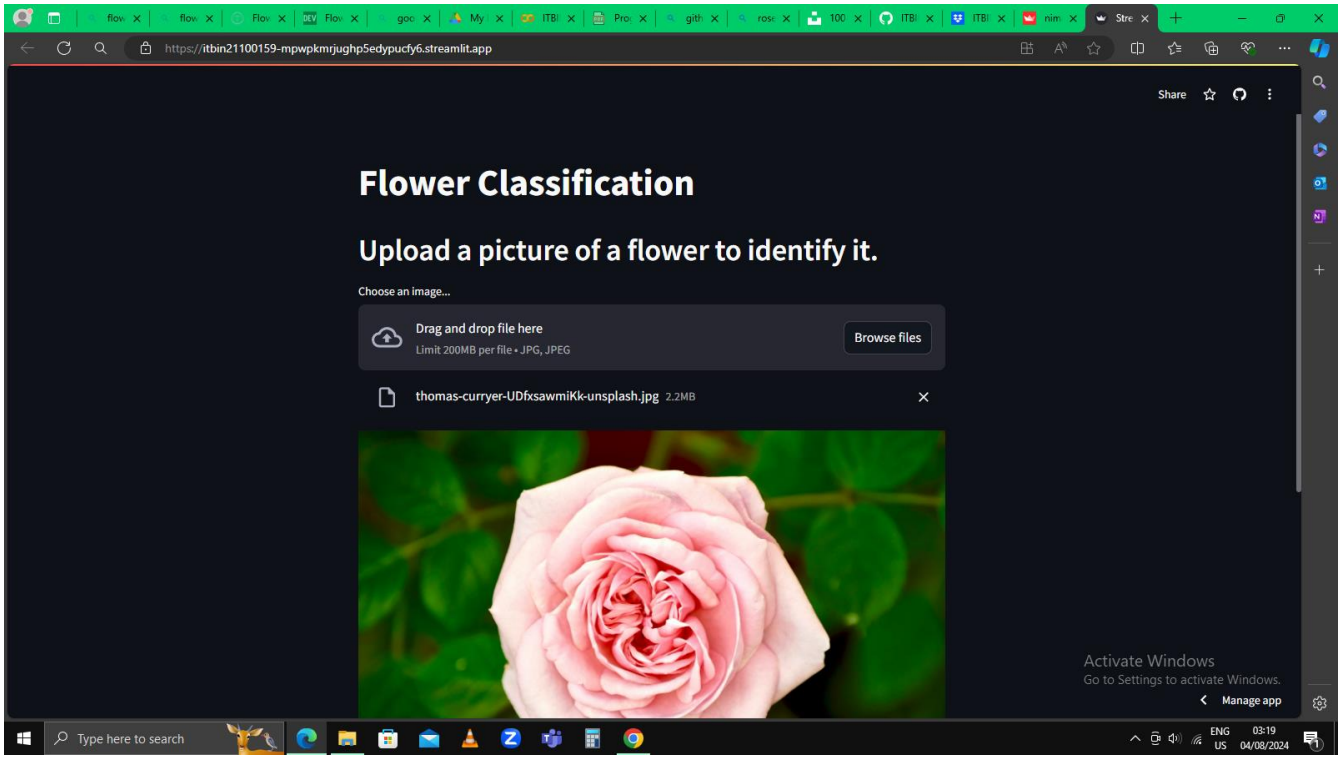


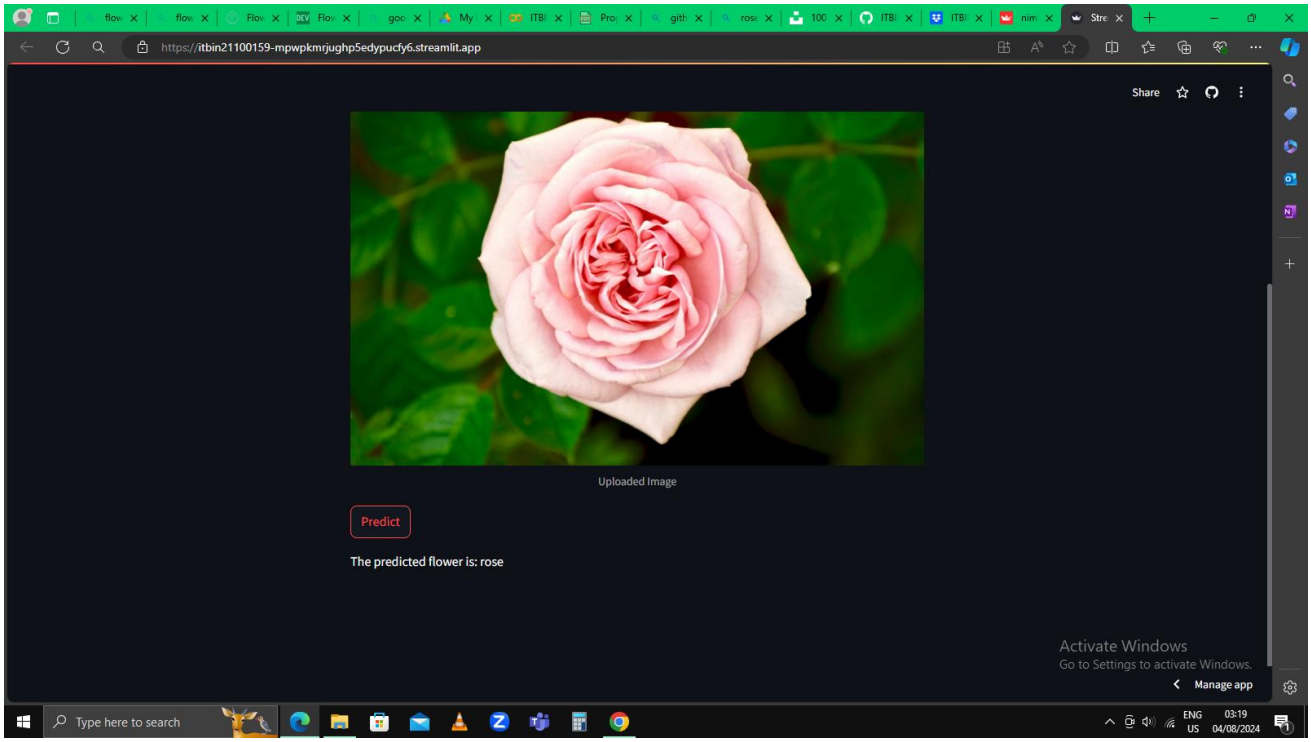
Stramlit app

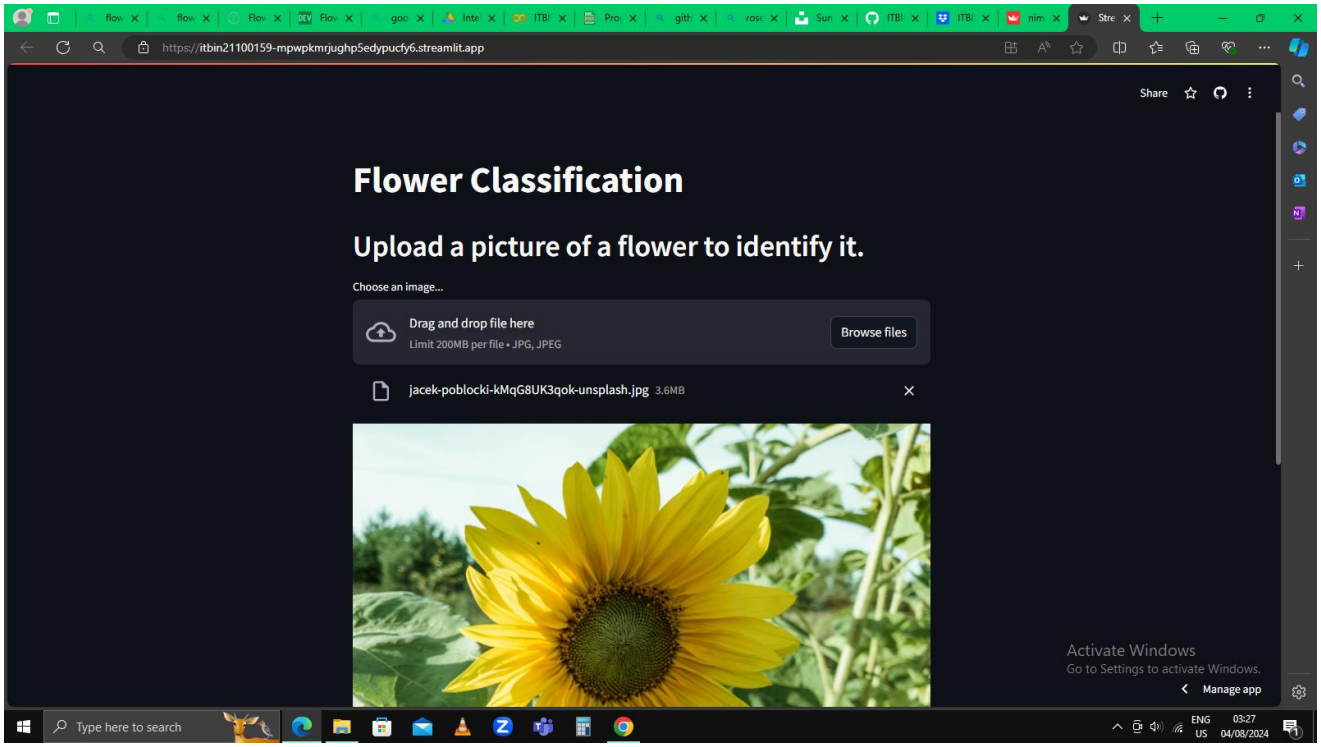
Flower_model inside dropbox and connect to App.py file inside github run the stremlit application and display the prediction

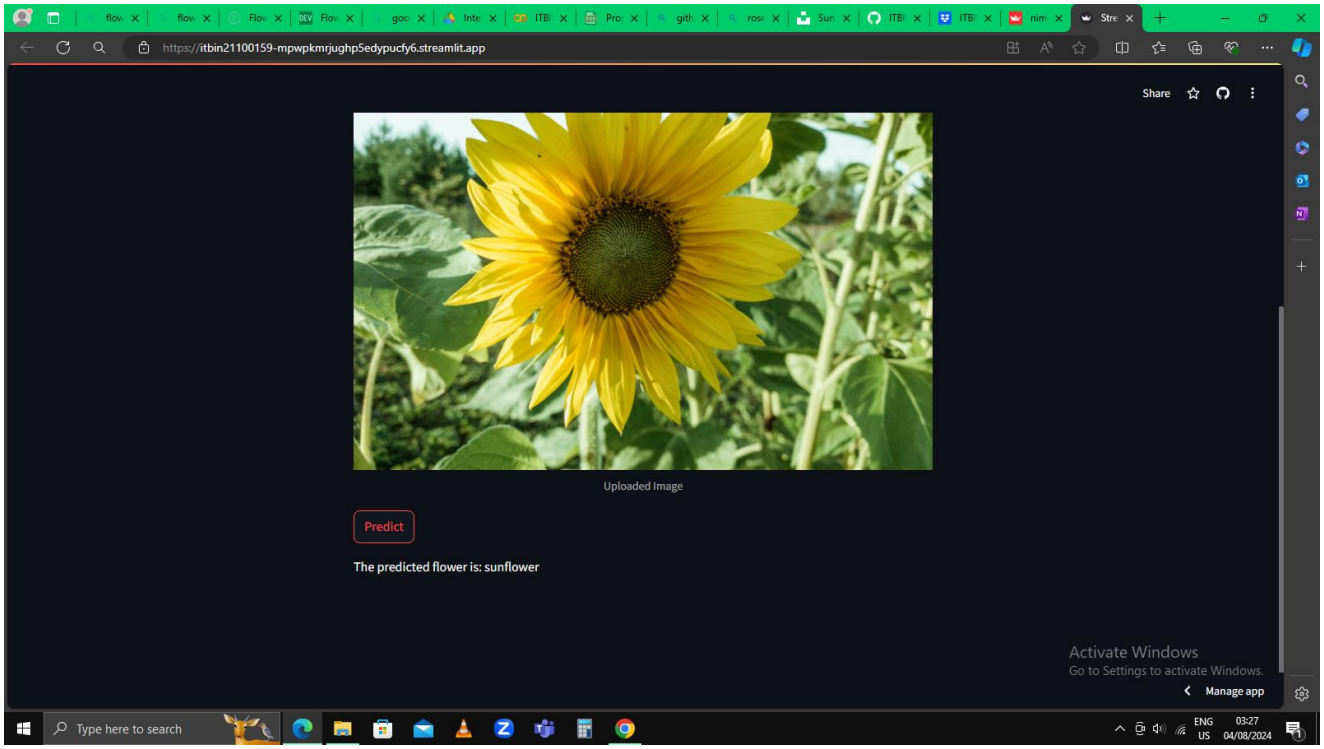
When user upload flower image it predict that flower name

Examples






https://itbin21100159-mpwpkmrjughp5edypucfy6.streamlit.app
Share
Flower Classification
Upload a picture of a flower to identify it.
Choose an image...
Drag and drop file here
Limit 200MB per file • JPG, JPEG
Browse files
jacek-poblocki-kMqG8UK3qok-unsplash.jpg 3.6MB
Activate Windows
Go to Settings to activate Windows.
Manage app
Type here to search
ENG
US
03:27
04/08/2024


https://itbin21100159-mpwpkmrjughp5edypucfy6.streamlit.app
Share
Uploaded Image
Predict
The predicted flower is: sunflower
Activate Windows
Go to Settings to activate Windows.
Manage app
Type here to search
ENG
US
03:27
04/08/2024

Links

GIthub Link

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Streamlit app

https://itbin21100159-mpwpkmrjughp5edypucfy6.streamlit.app