import tkinter as tk

from tkinter import filedialog

from tkinter.filedialog import askopenfile

from PIL import Image, ImageTk

import base64

import urllib.request

import array

# Importing the libraries

from tensorflow.keras.layers import \*

from tensorflow.keras.models import \*

from tensorflow.keras.preprocessing import image

import os

import numpy as np

import matplotlib.pyplot as plt

import cv2

model1 = load\_model("model.h5")

print("success")

my\_w = tk.Tk()

my\_w.geometry("400x400") # Size of the window

my\_w.title('Liver Cancer Detection system')

my\_font1=('times', 18, 'bold')

l1 = tk.Label(my\_w,text='Give Ultrasound Scan Images',width=30,font=my\_font1)

l1.grid(row=1,column=1)

b1 = tk.Button(my\_w, text='Upload File',

width=20,command = lambda:upload\_file())

b1.grid(row=2,column=1, padx=5, pady=5)

b3 = tk.Button(my\_w, text='Predict Output',

width=20,command = lambda:predict())

b3.grid(row=6,column=1, padx=5, pady=5)

def upload\_file():

global img

global filename

f\_types = [('ALL', '\*')]

filename = filedialog.askopenfilename(filetypes=f\_types)

img = ImageTk.PhotoImage(file=filename)

b2 =tk.Button(my\_w,image=img) # using Button

b2.grid(row=9,column=1, padx=5, pady=5)

print(filename)

def predict():

ft=0

st=0

lt=0

rt=0

ut=0

h=""

out=""

outv=5

img = image.load\_img(filename,target\_size=(224,224))

img = image.img\_to\_array(img, dtype='uint8')

img = np.expand\_dims(img,axis=0) ### flattening

ypred1 = model1.predict\_classes(img)

ypred1=ypred1.round()

print(ypred1)

if(ypred1[0]==0):

out = "Result for the given Ultrasound Liver Scan: Benign"

outv=0

elif(ypred1[0]==1):

out = "Result for the given Ultrasound Liver Scan: Liver Cancer Detected(Malignant)"

outv=1

ft=0

st=0

lt=0

rt=0

ut=0

print(out)

from tkinter import messagebox

my\_w.geometry("100x100")

messagebox.showinfo("Result",out)

print(" ")

my\_w.mainloop() # Keep the window open

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