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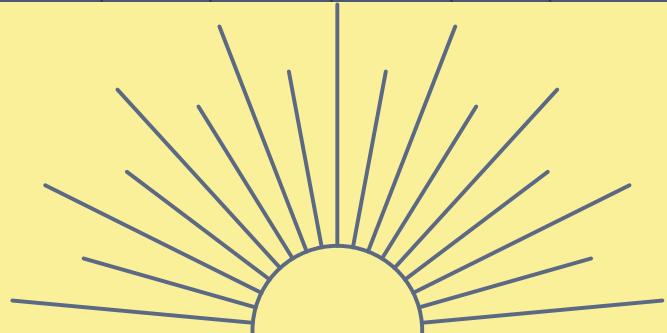
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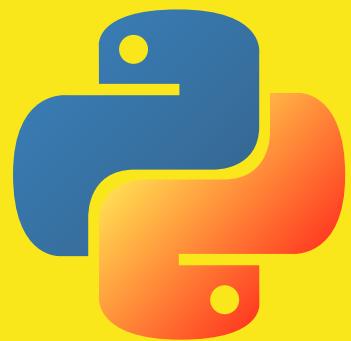
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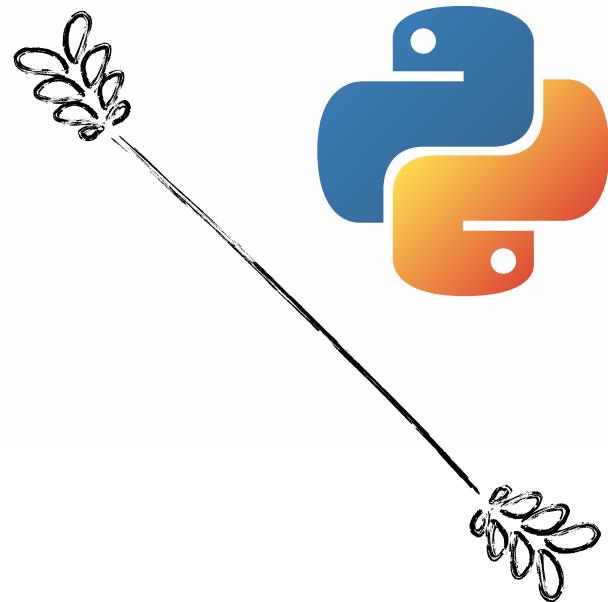


python



SOURCE CODE

Main.py



```
import pytsxs3
from Project_Library import *
voice_greetings()

name, age, gender, phn_no = user_data = user_data_verified()
options_used = []

engine = pytsxs3.init()
engine.setProperty("voice", "english")
engine.say("WELCOME TO <HEALTH AWARENESS DEVICE>")
engine.runAndWait()

while True:
    print()
    print("***** WELCOME TO <HEALTH AWARENESS DEVICE> *****")
    print()
    print("Enter '1' To watch videos in YouTube on diabetes")
    print("Enter '2' To check for bestselling diabetic medicine in TATA 1mg")
    print("Enter '3' To check if you have a tendency to be diabetic or not")
    print("**** Enter 'EXIT' to Exit")
    print()
    a = input("ENTER HERE:<< ")
    print()

    if a == "1":
        if a not in options_used:
            options_used.append(a)
            youtube()

    elif a == "2":
        if a not in options_used:
            print()
            engine.say("Redirecting to website...")
```

Main.py



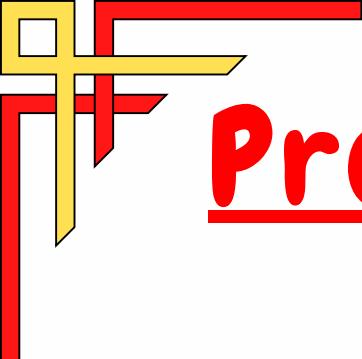
```
print("Redirecting to website [TATA 1mg]...")  
engine.runAndWait()  
options_used.append(a)  
onemg()  
  
elif a == "3":  
    if a not in options_used:  
        options_used.append(a)  
    diabetes_check(name, age, gender)  
  
elif a == "EXIT":  
    chk = input("Do you really want to Exit? (y/n): ")  
    if chk == "y" or chk == "Y":  
        engine.say("Thank You for using the <HEALTH AWARENESS DEVICE>!")  
        print("Thank You for using the <HEALTH AWARENESS DEVICE>!")  
        engine.runAndWait()  
        if not options_used:  
            options_used = "NONE"  
        user_data.append(options_used)  
        user_records(user_data)  
        print("User data recorded!")  
        print()  
        break  
    else:  
        continue  
  
else:  
    engine.say("Invalid Input! Re enter...")  
    print("Invalid Input! Re enter...")  
    engine.runAndWait()
```

Project_Library.py



```
import datetime
import pyttsx3
from selenium import webdriver
import matplotlib.pyplot as plt
import pywhatkit
import pandas as pd
import numpy as np
from sklearn.tree import DecisionTreeClassifier
import csv
engine = pyttsx3.init()
engine.setProperty("voice", "english")
# ----

def voice_greetings():
    try:
        engine.runAndWait()
        now = datetime.datetime.now()
        dt = now.strftime("%d/%m/%Y %H:%M:%S")
        print()
        print(dt)
        dt = dt.split(" ")
        a = dt[1].split(":")
        b = int(a[0])
        if b < 12:
            engine.say("GOOD MORNING!")
            print("GOOD MORNING!")
        elif 12 <= b < 16:
            engine.say("GOOD AFTERNOON!")
            print("GOOD AFTERNOON!")
        else:
            engine.say("GOOD EVENING!")
            print("GOOD EVENING!")
        engine.runAndWait()
        print()
    except Exception:
        print("!!* Error encountered **!!")
# -----
```



Project_Library.py



```
def user_data_verified():
    user=input("Enter your FULL NAME: ")
    while True:
        try:
            age = int(input("Enter your AGE: "))
            if age<1:
                print("Age must be GREATER THAN 0 [ZERO]!\nCheck the input and re-enter...")
                print()
            else:
                break
        except Exception:
            print("Enter INTEGER only!")
            print()
    while True:
        gen = str(input("Enter your GENDER\
[Male=>'M' || Female=>'F' || Others=>'X']: "))
        if gen not in ["M", "F", "X"]:
            print("Invalid option entered!\nCheck directions and re-enter...")
            print()
        else:
            break
    import pyttsx3
    while True:
        ph_no=input("Enter your INDIAN MOBILE NUMBER: +91-")
        if ph_no.isdigit()==False or len(ph_no)!=10:
            print("Invalid mobile number entered! Re enter...")
            print()
        else:
            break
    return [user, age, gen, ph_no]
# -----
```

Project_Library.py



```
def youtube():
    try:
        while True:
            print("**** ENTER 'BACK' to go back to MAIN MENU")
            print("--> Enter search-phrase with the word\
'diabetes' in it for YouTube videos: ")
            print()
            command=input("ENTER HERE:<< ")
            if command=="BACK":
                break
            elif 'diabetes' in command.lower():
                print()
                engine.say("Playing ")
                print("Playing...")
                print()
                engine.runAndWait()
                pywhatkit.playonyt(command)
            else:
                engine.say("Key-word 'diabetes' missing!")
                print("Key-word 'diabetes' missing!")
                engine.runAndWait()
                print()
    except Exception:
        print("!!* Error encountered **!!")
# -----
```

Project_Library.py



```
def onemg():
    url = 'https://www.1mg.com/categories/diabetes/diabetic-medicines-583'
    driver = webdriver.Chrome()
    driver.get(url)
    p_name = []
    p_price = []
    temp=0
    k=1
    for i in range(1, 4):
        pname = driver.find_element_by_xpath('//*[@id="category-container"]/div[2]\
/div[2]/div[2]/div/div[2]/div[1]/div['+str(i)+']/div/a/div['+str(4-i+k)+']/div[1]').text
        p_name.append(pname)
        pprice = driver.find_element_by_xpath('//*[@id="category-container"]/div[2]\
/div[2]/div[2]/div/div[2]/div[1]/div['+str(i)+']/div/a/div['+str(6-i+k)+']/div/div[2]/span').text
        plist = pprice.split()
        p_price.append(plist[0])
        temp, k = k, temp+k
    p_sname = []
    for i in p_name:
        p_sname.append((i.split())[0])
    for i in range(0, len(p_price)):
        p_price[i] = p_price[i].replace('₹', '')
        p_price[i] = float(p_price[i])
    d = {"product_name": p_sname, "product_price": p_price}
    df = pd.DataFrame(d)
    print(df)
    x = np.array(p_sname)
    y = np.array(p_price)
    plt.bar(x, y)
    plt.show()
    df.to_csv('deals.csv')
# -----
```

Project_Library.py



```
def diabetes_check(name, age, gender):
    while True:
        try:
            m_data = pd.read_csv("diabetes.csv")
            inp = m_data.drop(columns=['prediction'])
            output = m_data['prediction']
            model = DecisionTreeClassifier()
            model.fit(inp.values, output)
            if gender != "F":
                np = 0
            else:
                np = int(input("Please enter your NUMBER OF PREGNANCIES: "))
            g = int(input("Please enter your GLUCOSE LEVEL: "))
            bp = int(input("Please enter your BLOOD PRESSURE (DIASTOLIC): "))
            sf = int(input("Please enter your SKIN FOLD: "))
            bmi = float(input("Please enter your BMI [Don't know your BMI? Enter '-1']: "))
            if bmi == -1:
                mass=float(input("Enter your numeric weight (in kilograms): "))
                height=float(input("Enter you numeric height (in metres): "))
                bmi=((mass)/(height)**2)
            predict = model.predict([[np, g, bp, sf, bmi, age]])
            if predict[0] == "yes":
                print("Hello", name+",", "you seem to be\\
PRONE to diabetes! Consult your GP at earliest.")
                print()
            else:
                print("Hello", name+",", "you are WELL OFF\\
at present! But do not forget to take care of your health.")
                print()
            chk=input("Want to re-use the diabetes predictor? (y/n): ")
            if chk=="Y" or chk=="y":
                print()
                continue
            else:
                break
        except ValueError:
            print("Invalid input! Enter numerical value only...")
            print()
# -----
```

	diabetes.csv
1	npreg,glu,bp,skin,bmi,age,prediction
2	6,148,72,35,33.5,50,yes
3	1,85,66,29,36,54,yes
4	1,89,80,23,32.4,62,no
5	3,78,50,32,22.5,25,no
6	2,197,70,45,22.3,45,yes
7	5,166,72,25,26.5,43,yes
8	4,118,84,24,25.6,41,yes
9	1,103,30,210,24.5,25,no
10	3,135,88,26,21.5,26,no
11	9,119,80,28,22.5,28,yes
12	1,97,69,35,19.5,35,no
13	5,109,75,36,20,36,yes
14	3,88,78,34,27.6,34,no
15	3,122,84,32,23.8,31,no
16	4,97,85,31,21.9,39,yes
17	9,102,82,27,36.5,56,yes
18	2,90,80,26,24.6,51,no
19	4,111,79,25,20.4,53,yes
20	3,180,73,39,20.9,57,yes
21	2,106,71,34,23.8,58,no
22	3,171,74,31,24.5,60,yes

Project_Library.py



```
def user_records(data:list):
    header=[ "User Name", "Age", "Gender", "Contact number", "Options used"]
    datafile=r"Customer_Records.csv"
    try:
        with open(datafile, "r", newline=None) as recfile:
            chkrow=recfile.read()
            chkrow=chkrow.split("\n")[1].split(",")
            if header!=chkrow:
                data=[header]+[data]
            else:
                data=[data]
        recfile.close()
    except Exception:
        pass
    try:
        with open(datafile, "a", newline="") as recfile:
            f_writer=csv.writer(recfile)
            f_writer.writerows(data)
        recfile.close()
    except Exception:
        pass
```

Output

```
*IDLE Shell 3.9.7*
File Edit Shell Debug Options Window Help
>>>
= RESTART: /home/anchii33/Documents/Class 12 Boards Python Group Project/main.py

14/01/2022 20:36:19
GOOD EVENING!

Enter your FULL NAME: TEST BOT
Enter your AGE: 50
Enter your GENDER [Male=>'M' || Female=>'F' || Others=>'X']: M
Enter your INDIAN MOBILE NUMBER: +91-9999999999

|*|*|*|*|*|*** WELCOME TO <HEALTH AWARENESS DEVICE> ***|*|*|*|*|*

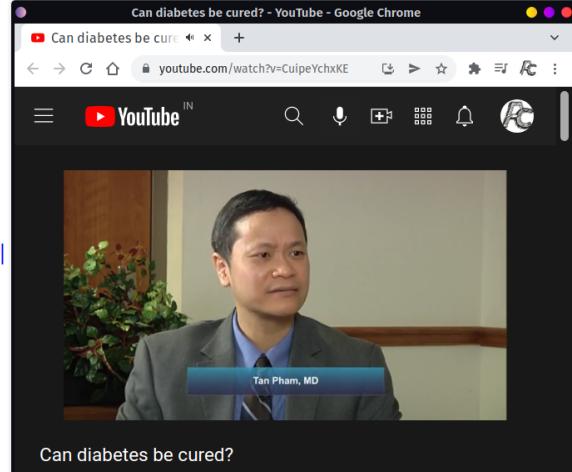
Enter '1' To watch videos in YouTube on diabetes
Enter '2' To check for bestselling diabetic medicine in TATA 1mg
Enter '3' To check if you have a tendency to be diabetic or not
**** Enter 'EXIT' to Exit

ENTER HERE:<< 1

**** ENTER 'BACK' to go back to MAIN MENU
--> Enter search-phrase with the word 'diabetes' in it for YouTube videos:

ENTER HERE:<< diabetes cure

Playing...


```

```
**** ENTER 'BACK' to go back to MAIN MENU
--> Enter search-phrase with the word 'diabetes' in it for YouTube videos:

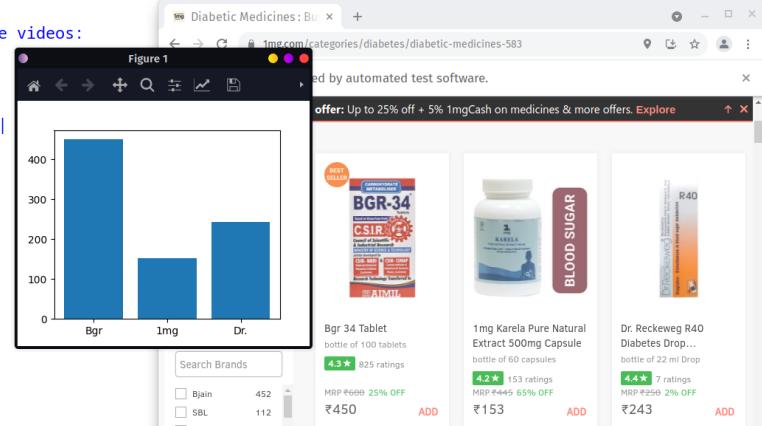
ENTER HERE:<< BACK

|*|*|*|*|*|*** WELCOME TO <HEALTH AWARENESS DEVICE> ***|*|*|*|*|*

Enter '1' To watch videos in YouTube on diabetes
Enter '2' To check for bestselling diabetic medicine in TATA 1mg
Enter '3' To check if you have a tendency to be diabetic or not
**** Enter 'EXIT' to Exit

ENTER HERE:<< 2

Redirecting to website [TATA 1mg]...
product_name product_price
0 Bgr 450.0
1 1mg 153.0
2 Dr. 237.0


```

	product_name	product_price
1	Bgr	450.0
2	1mg	153.0
3	Dr.	237.0

Output

|*|*|*|*|*|*** WELCOME TO <HEALTH AWARENESS DEVICE> ***|*|*|*|*|*

Enter '1' To watch videos in YouTube on diabetes
Enter '2' To check for bestselling diabetic medicine in TATA 1mg
Enter '3' To check if you have a tendency to be diabetic or not
**** Enter 'EXIT' to Exit

ENTER HERE:<< 3

Please enter your GLUCOSE LEVEL: 100
Please enter your BLOOD PRESSURE (DIASTOLIC): 120
Please enter your SKIN FOLD: 53
Please enter your BMI [Don't know your BMI? Enter '-1']: 40
Hello TEST BOT, you seem to be PRONE to diabetes! Consult your GP at earliest.

Want to re-use the diabetes predictor? (y/n): n

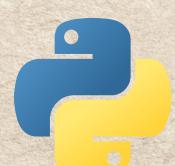
|*|*|*|*|*|*** WELCOME TO <HEALTH AWARENESS DEVICE> ***|*|*|*|*|*

Enter '1' To watch videos in YouTube on diabetes
Enter '2' To check for bestselling diabetic medicine in TATA 1mg
Enter '3' To check if you have a tendency to be diabetic or not
**** Enter 'EXIT' to Exit

ENTER HERE:<< EXIT

Do you really want to Exit? (y/n): y
Thank You for using the <HEALTH AWARENESS DEVICE>!
User data recorded!

Customer_Records.csv				
1				
2	User Name	Age	Gender	Contact number, Options used
3	TEST BOT	50	M	9999999999, "['1', '2', '3']"



python