#encoding:utf-8

import urllib.request

from tkinter import \*

from tkinter import messagebox

import sqlite3

import dateutil.parser

def **abrir\_url**(url,file):

try:

urllib.request.urlretrieve(url,file)

return file

except:

print (*"Error al conectarse a la página"*)

return None

def **extraer\_datos**():

fichero=*"noticias"*

if abrir\_url(*"https://sevilla.abc.es/rss/feeds/Sevilla\_Sevilla.xml"*,fichero):

f = open (fichero, *"r"*,encoding=*'utf-8'*)

s = f.read()

l1 = re.findall(*r'<item>\s\*<title>(.\*)</title>\s\*<link>(.\*)</link>'*, s)

l2 = re.findall(*r'<pubDate>(.\*)</pubDate>'*, s)

l=[]

l = [list(e1) for e1 in l1]

for e1,e2 in zip(l,l2):

e1.append(e2)

f.close()

return l[1:]

def **almacenar\_bd**():

conn = sqlite3.connect(*'noticias.db'*)

conn.text\_factory = str # para evitar problemas con el conjunto de caracteres que maneja la BD

conn.execute(*"DROP TABLE IF EXISTS NOTICIAS"*)

conn.execute(*'''CREATE TABLE NOTICIAS*

*(ID INTEGER PRIMARY KEY AUTOINCREMENT,*

*TITULO TEXT NOT NULL,*

*LINK TEXT NOT NULL,*

*FECHA DATE NOT NULL);'''*)

l = extraer\_datos()

for i in l:

conn.execute(*"""INSERT INTO NOTICIAS (TITULO, LINK, FECHA) VALUES (?,?,?)"""*,(i[0],i[1],i[2]))

conn.commit()

cursor = conn.execute(*"SELECT COUNT(\*) FROM NOTICIAS"*)

messagebox.showinfo( *"Base Datos"*, *"Base de datos creada correctamente \nHay "* + str(cursor.fetchone()[0]) + *" registros"*)

conn.close()

def **listar\_bd**():

conn = sqlite3.connect(*'noticias.db'*)

conn.text\_factory = str

cursor = conn.execute(*"SELECT TITULO,LINK, FECHA FROM NOTICIAS"*)

imprimir\_etiqueta(cursor)

conn.close()

def **imprimir\_etiqueta**(cursor):

v = Toplevel()

sc = Scrollbar(v)

sc.pack(side=RIGHT, fill=Y)

lb = Listbox(v, width=150, yscrollcommand=sc.set)

for row in cursor:

lb.insert(END,row[0])

lb.insert(END,row[1])

lb.insert(END,row[2])

lb.insert(END,*''*)

lb.pack(side = LEFT, fill = BOTH)

sc.config(command = lb.yview)

def **imprimir\_etiqueta\_1**(cursor,fecha):

v = Toplevel()

sc = Scrollbar(v)

sc.pack(side=RIGHT, fill=Y)

lb = Listbox(v, width=150, yscrollcommand=sc.set)

for row in cursor:

if dateutil.parser.parse(fecha,dayfirst=True).date() == dateutil.parser.parse(row[2]).date():

lb.insert(END,row[0])

lb.insert(END,row[1])

lb.insert(END,row[2])

lb.insert(END,*''*)

lb.pack(side = LEFT, fill = BOTH)

sc.config(command = lb.yview)

def **buscar\_mes\_bd**():

def **listar\_busqueda**(event):

conn = sqlite3.connect(*'noticias.db'*)

conn.text\_factory = str

s = *"%"*+en.get()+*"%"*

cursor = conn.execute(*"""SELECT TITULO,LINK,FECHA FROM NOTICIAS WHERE FECHA LIKE ?"""*,(s,)) # al ser de tipo string, el ? le pone comillas simples

imprimir\_etiqueta(cursor)

conn.close()

v = Toplevel()

lb = Label(v, text=*"Introduzca el mes (Xxx): "*)

lb.pack(side = LEFT)

en = Entry(v)

en.bind(*"<Return>"*, listar\_busqueda)

en.pack(side = LEFT)

def **buscar\_dia\_bd**():

def **listar\_busqueda**(event):

conn = sqlite3.connect(*'noticias.db'*)

conn.text\_factory = str

cursor = conn.execute(*"""SELECT TITULO,LINK,FECHA FROM NOTICIAS"""*)

imprimir\_etiqueta\_1(cursor,en.get())

conn.close()

v = Toplevel()

lb = Label(v, text=*"Introduzca la fecha (dd/mm/aaaa): "*)

lb.pack(side = LEFT)

en = Entry(v)

en.bind(*"<Return>"*, listar\_busqueda)

en.pack(side = LEFT)

def **ventana\_principal**():

top = Tk()

almacenar = Button(top, text=*"Almacenar"*, command = almacenar\_bd)

almacenar.pack(side = LEFT)

listar = Button(top, text=*"Listar"*, command = listar\_bd)

listar.pack(side = LEFT)

Buscar = Button(top, text=*"Busca Mes"*, command = buscar\_mes\_bd)

Buscar.pack(side = LEFT)

Buscar = Button(top, text=*"Busca Día"*, command = buscar\_dia\_bd)

Buscar.pack(side = LEFT)

top.mainloop()

if \_\_name\_\_ == *"\_\_main\_\_"*:

ventana\_principal()