**LOGIN**

from tkinter import \* import sqlite3

root = Tk()

root.title("Python: Simple Login Application") width = 400

height = 280

screen\_width = root.winfo\_screenwidth() screen\_height = root.winfo\_screenheight() x = (screen\_width/2) - (width/2)

y = (screen\_height/2) - (height/2) root.geometry("%dx%d+%d+%d" % (width, height, x, y)) root.resizable(0, 0)

#==============================VARIABLES=========================

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USERNAME = StringVar() PASSWORD = StringVar()

#==============================FRAMES============================

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Top = Frame(root, bd=2, relief=RIDGE) Top.pack(side=TOP, fill=X)

Form = Frame(root, height=200) Form.pack(side=TOP, pady=20)

#==============================LABELS============================

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lbl\_title = Label(Top, text = "Python: Simple Login Application", font=('arial', 15)) lbl\_title.pack(fill=X)

lbl\_username = Label(Form, text = "Username:", font=('arial', 14), bd=15) lbl\_username.grid(row=0, sticky="e")

lbl\_password = Label(Form, text = "Password:", font=('arial', 14), bd=15)

lbl\_password.grid(row=1, sticky="e") lbl\_text = Label(Form) lbl\_text.grid(row=2, columnspan=2)

#==============================ENTRY WIDGETS==================================

username = Entry(Form, textvariable=USERNAME, font=(14)) username.grid(row=0, column=1)

password = Entry(Form, textvariable=PASSWORD, show="\*", font=(14)) password.grid(row=1, column=1)

#==============================METHODS===========================

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def Database(): global conn, cursor

conn = sqlite3.connect("pythontut.db") cursor = conn.cursor()

cursor.execute("CREATE TABLE IF NOT EXISTS `member` (mem\_id INTEGER NOT NULL PRIMARY KEY AUTOINCREMENT, username TEXT, password TEXT)")

cursor.execute("SELECT \* FROM `member` WHERE `username` = 'admin' AND

`password` = 'admin'")

if cursor.fetchone() is None:

cursor.execute("INSERT INTO `member` (username, password) VALUES('admin', 'admin')")

conn.commit()

def Login(event=None): Database()

if USERNAME.get() == "" or PASSWORD.get() == "":

lbl\_text.config(text="Please complete the required field!", fg="red") else:

cursor.execute("SELECT \* FROM `member` WHERE `username` = ? AND `password`

= ?", (USERNAME.get(), PASSWORD.get()))

if cursor.fetchone() is not None: HomeWindow() USERNAME.set("")

PASSWORD.set("")

lbl\_text.config(text="")

else:

lbl\_text.config(text="Invalid username or password", fg="red") USERNAME.set("")

PASSWORD.set("")

cursor.close() conn.close()

#==============================BUTTON WIDGETS=================================

btn\_login = Button(Form, text="Login", width=45, command=Login) btn\_login.grid(pady=25, row=3, columnspan=2) btn\_login.bind('<Return>', Login)

def HomeWindow(): global Home root.withdraw() Home = Toplevel()

Home.title("Python: Simple Login Application") width = 600

height = 500

screen\_width = root.winfo\_screenwidth() screen\_height = root.winfo\_screenheight() x = (screen\_width/2) - (width/2)

y = (screen\_height/2) - (height/2) root.resizable(0, 0)

Home.geometry("%dx%d+%d+%d" % (width, height, x, y))

lbl\_home = Label(Home, text="Successfully Login!", font=('times new roman', 20)).pack()

btn\_back = Button(Home, text='Back', command=Back).pack(pady=20, fill=X)

def Back(): Home.destroy() root.deiconify()

**REGISTRATION**

from tkinter import\* base = Tk()

base.geometry("500x500")

base.title("registration form")

labl\_0 = Label(base, text="Registration form",width=20,font=("bold", 20)) labl\_0.place(x=90,y=53)

lb1= Label(base, text="Enter Name", width=10, font=("arial",12)) lb1.place(x=20, y=120)

en1= Entry(base) en1.place(x=200, y=120)

lb3= Label(base, text="Enter Email", width=10, font=("arial",12)) lb3.place(x=19, y=160)

en3= Entry(base) en3.place(x=200, y=160)

lb4= Label(base, text="Contact Number", width=13,font=("arial",12)) lb4.place(x=19, y=200)

en4= Entry(base) en4.place(x=200, y=200)

lb5= Label(base, text="Select Gender", width=15, font=("arial",12)) lb5.place(x=5, y=240)

var = IntVar()

Radiobutton(base, text="Male", padx=5,variable=var, value=1).place(x=180, y=240) Radiobutton(base, text="Female", padx =10,variable=var, value=2).place(x=240,y=240) Radiobutton(base, text="others", padx=15, variable=var, value=3).place(x=310,y=240)

list\_of\_cntry = ("United States", "India", "Nepal", "Germany") cv = StringVar()

drplist= OptionMenu(base, cv, \*list\_of\_cntry) drplist.config(width=15)

cv.set("United States")

lb2= Label(base, text="Select Country", width=13,font=("arial",12)) lb2.place(x=14,y=280)

drplist.place(x=200, y=275)

lb6= Label(base, text="Enter Password", width=13,font=("arial",12)) lb6.place(x=19, y=320)

en6= Entry(base, show='\*') en6.place(x=200, y=320)

lb7= Label(base, text="Re-Enter Password", width=15,font=("arial",12)) lb7.place(x=21, y=360)

en7 =Entry(base, show='\*') en7.place(x=200, y=360)

Button(base, text="Register", width=10).place(x=200,y=400) base.mainloop()

**START AND DESTINATION**

# import module import requests

from bs4 import BeautifulSoup

# user define function # Scrape the data

def getdata(url):

r = requests.get(url) return r.text

# input by geek from\_Station\_code = "GAYA" from\_Station\_name = "GAYA"

To\_station\_code = "PNBE" To\_station\_name = "PATNA" # url

url = "https://[www.railyatri.in/booking/trains-between-](http://www.railyatri.in/booking/trains-between-) stations?from\_code="+from\_Station\_code+"&from\_name="+from\_Station\_name+"+JN+&j ourney\_date=+Wed&src=tbs&to\_code=" + \

To\_station\_code+"&to\_name="+To\_station\_name + \ "+JN+&user\_id=-

1603228437&user\_token=355740&utm\_source=dwebsearch\_tbs\_search\_trains"

# pass the url

# into getdata function htmldata = getdata(url)

soup = BeautifulSoup(htmldata, 'html.parser')

# find the Html tag # with find()

# and convert into string data\_str = ""

for item in soup.find\_all("div", class\_="col-xs-12 TrainSearchSection"): data\_str = data\_str + item.get\_text()

result = data\_str.split("\n")

print("Train between "+from\_Station\_name+" and "+To\_station\_name) print("")

# Display the result for item in result:

if item != "": print(item)

**TICKET BOOKING**

print("\n\nTicket Booking System\n") restart = ('Y')

while restart != ('N','NO','n','no'): print("1.Check PNR status") print("2.Ticket Reservation")

option = int(input("\nEnter your option : "))

if option == 1:

print("Your PNR status is t3") exit(0)

elif option == 2:

people = int(input("\nEnter no. of Ticket you want : ")) name\_l = []

age\_l = [] sex\_l = []

for p in range(people):

name = str(input("\nName : ")) name\_l.append(name)

age = int(input("\nAge : ")) age\_l.append(age)

sex = str(input("\nMale or Female : ")) sex\_l.append(sex)

restart = str(input("\nDid you forgot someone? y/n: ")) if restart in ('y','YES','yes','Yes'):

restart = ('Y') else :

x = 0

print("\nTotal Ticket : ",people) for p in range(1,people+1): print("Ticket : ",p)

print("Name : ", name\_l[x])

print("Age : ", age\_l[x])

print("Sex : ",sex\_l[x]) x += 1

**SEATS BOOKING**

def berth\_type(s):

if s>0 and s<73:

if s % 8 == 1 or s % 8 == 4: print (s), "is lower berth"

elif s % 8 == 2 or s % 8 == 5: print (s), "is middle berth" elif s % 8 == 3 or s % 8 == 6: print (s), "is upper berth"

elif s % 8 == 7:

print (s), "is side lower berth" else:

print (s), "is side upper berth"

else:

print (s), "invalid seat number"

# Driver code s = 10

berth\_type(s) # fxn call for berth type

s = 7

berth\_type(s) # fxn call for berth type

s = 0

berth\_type(s) # fxn call for berth type

**CONFIRMATION**

# import module import requests

from bs4 import BeautifulSoup import pandas as pd

# user define function # Scrape the data

def getdata(url):

r = requests.get(url) return r.text

# input by geek

train\_name = "03391-rajgir-new-delhi-clone-special-rgd-to-ndls"

# url

url = "https:/[/www](http://www.railyatri.in/live-train-status/).[railyatri.in/live-train-status/"](http://www.railyatri.in/live-train-status/)+train\_name

# pass the url

# into getdata function htmldata = getdata(url)

soup = BeautifulSoup(htmldata, 'html.parser')

# traverse the live status from # this Html code

data = []

for item in soup.find\_all('script', type="application/ld+json"): data.append(item.get\_text())

# convert into dataframe df = pd.read\_json(data[2])

# display this column of # dataframe

print(df["mainEntity"][0]['name'])

print(df["mainEntity"][0]['acceptedAnswer']['text'])

**TICKET GENERATION**

class Ticket: counter=0

def init (self,passenger\_name,source,destination): self. passenger\_name=passenger\_name

self. source=source

self. destination=destination self.Counter=Ticket.counter Ticket.counter+=1

def validate\_source\_destination(self):

if (self. source=="Delhi" and (self. destination=="Pune" or self. destination=="Mumbai" or self. destination=="Chennai" or self. destination=="Kolkata")):

return True else:

return False

def generate\_ticket(self ): if True:

ticket\_id=self. source[0]+self. destination[0]+"0"+str(self.Counter) print( "Ticket id will be:", ticket\_id)

else:

return False

def get\_ticket\_id(self): return self.ticket\_id

def get\_passenger\_name(self): return self. passenger\_name

def get\_source(self):

if self. source=="Delhi": return self. source

else:

print("you have written invalid soure option") return None

def get\_destination(self):

if self. destination=="Pune": return self. destination

elif self. destination=="Mumbai": return self. destination

elif self. destination=="Chennai": return self. destination

elif self. destination=="Kolkata": return self. destination

else:

return None

**OTP GENERATION**

import os import math import random import smtplib

digits = "0123456789" OTP = ""

for i in range (6):

OTP += digits[math.floor(random.random()\*10)]

otp = OTP + " is your OTP" message = otp

s = smtplib.SMTP('smtp.gmail.com', 587) s.starttls()

emailid = input("Enter your email: ")

s.login("YOUR Gmail ID", "YOUR APP PASSWORD")

s.sendmail('&&&&&&',emailid,message)

a = input("Enter your OTP >>: ") if a == OTP:

print("Verified") else:

print("Please Check your OTP again")

**OTP VERIFICATION**

import os import math import random import smtplib

digits = "0123456789" OTP = ""

for i in range (6):

OTP += digits[math.floor(random.random()\*10)]

otp = OTP + " is your OTP" message = otp

s = smtplib.SMTP('smtp.gmail.com', 587) s.starttls()

emailid = input("Enter your email: ")

s.login("YOUR Gmail ID", "YOUR APP PASSWORD")

s.sendmail('&&&&&&',emailid,message)

a = input("Enter your OTP >>: ") if a == OTP:

print("Verified") else:

print("Please Check your OTP again")