

# LUCKNOW PUBLIC SCHOOL

(C. P. SINGH FOUNDATION)



## Project Report

### *Informatics Practices(065)*

(Session: 2023-24)

Student Name : Ashutosh Prajapati

Class : XII

Section : A

Roll No. :

# CERTIFICATE

NAME : ASHUTOSH PRAJAPATI  
ROLL NO :

CLASS/SEC : XII-A  
EXAM NAME: AISSCE

This is to certify that content of this project  
*Bike Showroom Management*  
by  
*Ashutosh Prajapati*  
is the bonafide work of him/her submitted to  
*Lucknow Public School, Jankipuram*  
for consideration in the partial accomplishment of the provision of CBSE,  
for the award of  
*All India Senior Secondary Certificate Examination*  
in  
*Informatics Practices -065*

THE ORIGINAL RESEARCH WORK WAS CARRIED OUT BY HIM/HER  
UNDER MY SUPERVISION IN THE ACADEMIC YEAR 2023-24. ON THE  
BASIS OF THE DECLARATION MADE BY HIM/HER, I RECOMMENDED THE  
PROJECT REPORT FOR EVALUATION.

EXAMINER'S SIGNATURE

TEACHER IN-CHARGE

PRINCIPAL

DATE

STAMP

# **ACKNOWLEDGEMENT**

I take this opportunity with great pleasure and respect to express my first and foremost thanks to the principal,

**“Mrs. Shabnam Singh”**

for her encouragement and for the facilities that she provided for this project work. I extend my hearty thanks to

**“Mr. Abhay Pratap Singh”**

Informatics Practices Teacher who guided me throughout the successful completion of this project. I take this opportunity to express my deep sense of gratitude for his guidance, constant encouragement, immense motivation, which has sustained my efforts at all the stages of this project.

I can't forget to offer my sincere thanks to the parents and to also my classmates who helped me to carry out this project work successfully and for their valuable advice and support, which I received from time to time.

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# **INTRODUCTION**

This project aims to create a user-friendly and simple **“BIKE SHOWROOM MANAGEMENT SYSTEM”** in which it allows the user to purchase a vehicle and the system enters its record in the database along with the previously stored data and allows user to receive the bill for their respective purchases.

The system is created by using the following technologies:

- **Python** – A general purpose programming language which is popular around the world and is easy to learn and use.
- **Tkinter** – A built-in module in Python language which allows user to create Graphic User Interfaces (GUIs).
- **Pandas** – A Python library used for data management and manipulation
- **CSV(Comma Separated Values)** – A file format used to store data.

# **SOFTWARE AND HARDWARE REQUIREMENT**

## **Software Specification: -**

**Operating system:** Windows 7 or above

**Platform:** Python IDLE 3.10 or above

**Languages:** Python

## **Hardware specification: -**

**Processor:** Dual core or above

**Hard Disk:** 40 GB

**RAM:** 2 GB

## **Note:**

Please install the following libraries before running the program:

- Pandas
- Tkinter (if not built-in)

# SOURCE CODE

```
# imports
import pandas as pd
from tkinter import *
import tkinter as tk
from datetime import datetime

# configuring tkinter window
win = Tk()
win.geometry('700x500')
win.title("Welcome to TVS AP MOTORS")
win.rowconfigure(index=15,weight=1)
win.columnconfigure(index=12,weight=1)

# form
customername = StringVar()
fathername = StringVar()
emailid = StringVar()
phone = StringVar()
model = StringVar()
price = IntVar()
qty = IntVar()

mddict = {"Jupiter110cc": 68998,"NTORQ125CC": 73490,"RR310": 78590,"XL100":
84990,"Raider125": 86990,"Ronin225": 265000}
mdlsavail = ['Jupiter110cc','NTORQ125CC','RR310','XL100','Raider125','Ronin225']
mdlsprice=[68998,73490,78590,84990,86990,265000]

Label(win,text="MODELS AVAILABLE WITH THEIR
PRICE").grid(row=1,column=0)
for i in range(6):
    Label(win,text=mdlsavail[i],borderwidth=1,relief='solid',width=26).grid(row=i+1,co
lumn=1,columnspan=1)
    Label(win,text=mdlsprice[i],borderwidth=1,relief='solid',width=26).grid(row=i+1,co
lumn=2)

Label(win,text="Customer Name *").grid(row=7,column=0)
Label(win,text="Father Name * ").grid(row=8,column=0)
Label(win,text="Email ID * ").grid(row=9,column=0)
Label(win,text="Phone Number * ").grid(row=10,column=0)
Label(win,text="Model").grid(row=11,column=0)
Label(win,text="Quantity").grid(row=12,column=0)
Label(win, text='Entries with * are mandatory.').grid(row=13,column=0)

Entry(win , width=30,textvariable=customername).grid(row=7,column=1)
Entry(win , width=30,textvariable=fathername).grid(row=8,column=1)
Entry(win , width=30,textvariable=emailid).grid(row=9,column=1)
Entry(win , width=30,textvariable=phone).grid(row=10,column=1)
Entry(win , width=30,textvariable=model).grid(row=11,column=1)
```

```
Entry(win , width=30,textvariable=qty).grid(row=12,column=1)
```

```
# pandas
```

```
def datasend():
```

```
    df = pd.read_csv('project\\bikepurchaseDB.csv')
```

```
    if model.get() in mdl.savail and phone.get().isnumeric() == True:
```

```
        entrydict={'Customer':customername.get(),'Father':fathername.get(),'Email':emailid.get(),'Phone':int(phone.get()),'Model':model.get(),'Price':mddict[model.get()], 'Quantity':qty.get() }
```

```
        df.loc[len(df.index)]=entrydict
```

```
    else:
```

```
        errorwin = Tk()
```

```
        Label(errorwin,text='Enter valid Details.').pack()
```

```
        Button(errorwin,text='OK',command=errorwin.destroy).pack()
```

```
        errorwin.mainloop()
```

```
    df.to_csv('school\\c12\\project\\project2.0\\bikepurchaseDB.csv', index=False)
```

```
    print(df)
```

```
# new window
```

```
def new_window():
```

```
    billwin = Toplevel(win)
```

```
    billwin.columnconfigure(index=5,weight=1)
```

```
    billwin.rowconfigure(index=7,weight=1)
```

```
    billwin.title('BILL | AP MOTORS')
```

```
    Label(billwin,text='        AP MOTORS',
```

```
    font=('Algerian',36)).grid(row=1,column=1,columnspan=3)
```

```
    Label(billwin,text='                XYZ Road, Jankipuram, Lucknow - 226220',
```

```
    font='Arial').grid(row=2,column=1,columnspan=3)
```

```
    Label(billwin,text='                Email - apmotorslko@hotmail.com                Contact - 0522-696969', font='Arial').grid(row=3,column=1,columnspan=3)
```

```
    Label(billwin,text='Details of Customer                Date: {} Time: {}                \n Name: {} s/o {} | Email:
```

```
    '{}.format(datetime.now().date(),datetime.now().strftime("%H:%M:%S"),customer name.get(),fathername.get(),emailid.get()),font=('Arial',10),borderwidth=1,relief='solid',width=91).grid(row=4,column=1,columnspan=4)
```

```
    Label(billwin,text='Description of Goods',font=('Arial',12),borderwidth=1,relief='solid',width=50).grid(row=5,column=1)
```

```
    Label(billwin,text='Quantity',font=('Arial',12),borderwidth=1,relief='solid',width=10).grid(row=5,column=2)
```

```
    Label(billwin,text='Rate',font=('Arial',12),borderwidth=1,relief='solid',width=10).grid(row=5,column=3)
```

```
    Label(billwin,text='Amount',font=('Arial',12),borderwidth=1,relief='solid',width=10).grid(row=5,column=4)
```

```
    Label(billwin,text=' {}
```

```
    {}'.format('TVS',model.get()),font=('Arial',12),height=5,width=50,borderwidth=1,relief='solid',anchor=N).grid(row=6,column=1)
```

```
    Label(billwin,text=' {}'.format(qty.get()),font=('Arial',12),borderwidth=1,relief='solid',height=5,width=10,anchor=N).grid(row=6,column=2)
```

```
    Label(billwin,text=' {}'.format(mddict[model.get()]),font=('Arial',12),borderwidth=1,
```



`relief='solid',height=5,width=10,anchor=N).grid(row=6,column=3)`

`Label(billwin,text=(mddict[model.get()]*qty.get()),font=('Arial',12),borderwidth=1,relief='solid',height=5,width=10,anchor=N).grid(row=6,column=4)`

`Label(billwin,text='TOTAL AMOUNT',font=('Arial',12),borderwidth=1,relief='solid',height=2,width=71,anchor=CENTER).grid(row=7,column=1,columnspan=3)`

`Label(billwin,text=(mddict[model.get()]*qty.get()),font=('Arial',12),borderwidth=1,relief='solid',height=2,width=10,anchor=CENTER).grid(row=7,column=4)`

`Button(win , text='SUBMIT', command=datasend).grid(row=14,column=1)`

`Button(win , text='BILL', command=new_window).grid(row=14,column=2)`

`mainloop()`

File Edit Format Run Options Window Help

```
# imports
import pandas as pd
from tkinter import * #type: ignore
import tkinter as tk
from datetime import datetime

# window
win = Tk()
win.geometry('700x500')
win.title("Welcome to TVS AP MOTORS")
win.rowconfigure(index=15,weight=1)
win.columnconfigure(index=12,weight=1)

# form
customername = StringVar() # variable to store data entered.
fathername = StringVar()
emailid = StringVar()
phone = StringVar()
model = StringVar()
price = IntVar()
qty = IntVar()

mddict = {"Jupiter110cc": 68998,"NTORQ125CC": 73490,"RR310": 78590,"XL100": 84990,"Raider125": 86990,"Ronin225": 265000}
mdlsavail = ['Jupiter110cc','NTORQ125CC','RR310','XL100','Raider125','Ronin225']
mdlsprice=[68998,73490,78590,84990,86990,265000]

Label(win,text="MODELS AVAILABLE WITH THEIR PRICE").grid(row=1,column=0) # models available
for i in range(6):
    Label(win,text=mdlsavail[i],borderwidth=1,relief='solid',width=26).grid(row=i+1,column=1,columnspan=1)
    Label(win,text=mdlsprice[i],borderwidth=1,relief='solid',width=26).grid(row=i+1,column=2)
```

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File Edit Format Run Options Window Help

```
Label(win,text="Customer Name *").grid(row=7,column=0) # customer
Label(win,text="Father Name * ").grid(row=8,column=0) # father
Label(win,text="Email ID * ").grid(row=9,column=0) # email
Label(win,text="Phone Number * ").grid(row=10,column=0) # phone
Label(win,text="Model").grid(row=11,column=0) # bike model
Label(win,text="Quantity").grid(row=12,column=0) # qty
Label(win, text='Entries with * are mandatory.').grid(row=13,column=0) # warning

Entry(win , width=30,textvariable=customername).grid(row=7,column=1) # customer entry
Entry(win , width=30,textvariable=fathername).grid(row=8,column=1) # father entry
Entry(win , width=30,textvariable=emailid).grid(row=9,column=1) # email entry
Entry(win , width=30,textvariable=phone).grid(row=10,column=1) # phone entry
Entry(win , width=30,textvariable=model).grid(row=11,column=1) # model entry
Entry(win , width=30,textvariable=qty).grid(row=12,column=1) # qty entry

# pandas
def datasend():
    df = pd.read_csv('school\\c12\\project2.0\\bikepurchaseDB.csv')
    # entries = [customername.get(),fathername.get(),emailid.get(),phone.get(),company.get(),model.get(),price.get()]
    if model.get() in mdlsavail and phone.get().isnumeric() == True:
        entrydict={'Customer':customername.get(), 'Father':fathername.get(), 'Email':emailid.get(), 'Phone':int(phone.get()), 'Model':model.get(), 'Qty':int(qty.get())}
        df.loc[len(df.index)]=entrydict #type: ignore
    else:
        errorwin = Tk()
        Label(errorwin,text='Enter valid Details.').pack()
        Button(errorwin,text='OK',command=errorwin.destroy).pack()
        errorwin.mainloop()
    # dfnew = pd.DataFrame(entrydict)
    # df = df.add(dfnew)
    df.to_csv('school\\c12\\project2.0\\bikepurchaseDB.csv', index=False)
```

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File Edit Format Run Options Window Help

```
# df = df.add(dfnew)
df.to_csv('school\\c12\\project2.0\\bikepurchaseDB.csv', index=False)
print(df)

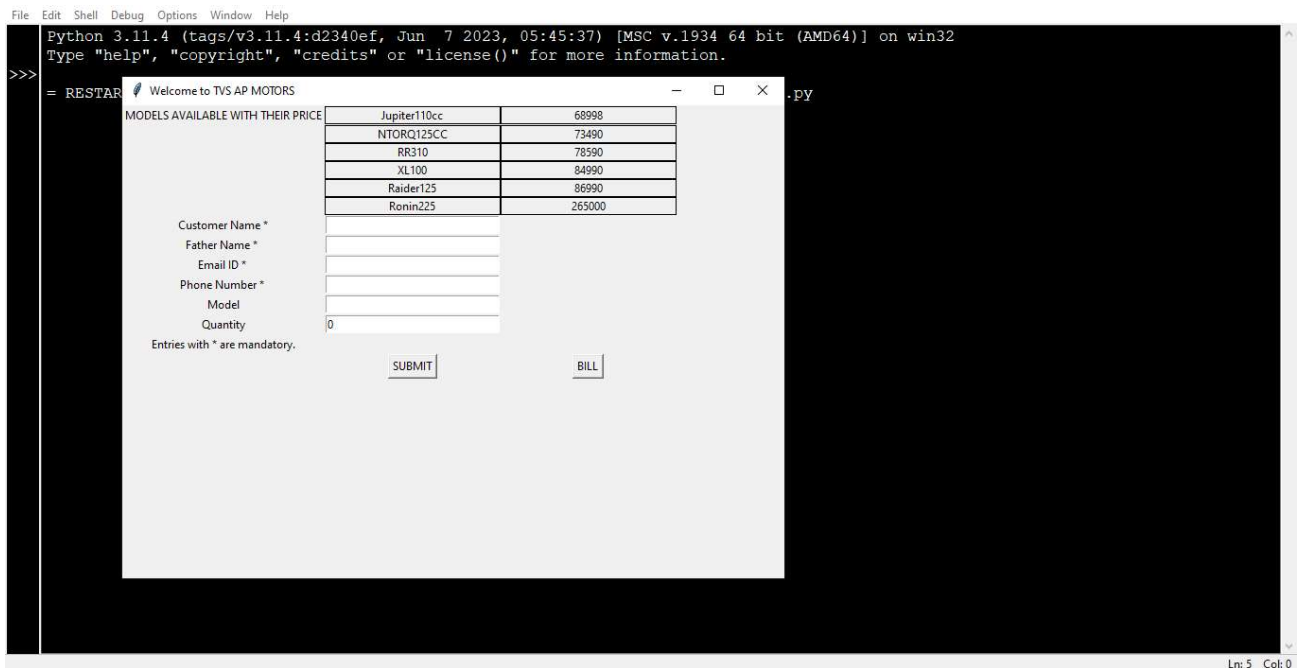
# vals = [customername,fathername,emailid,phone,company,model,price]
# new window
def new_window():
    billwin = Toplevel(win)
    billwin.columnconfigure(index=5,weight=1)
    billwin.rowconfigure(index=7,weight=1)
    billwin.title('BILL | AP MOTORS')
    Label(billwin, text='AP MOTORS', font=('Algerian',36)).grid(row=1,column=1,columnspan=3)
    Label(billwin, text='XYZ Road, Jankipuram, Lucknow - 226220', font='Arial').grid(row=2,column=1,columnspan=3)
    Label(billwin, text='Email - apmotorslko@hotmail.com Contact - 0522-696969', font='Arial').grid(row=3,column=1,columnspan=3)
    Label(billwin, text='Details of Customer Date:{} Time:{} \n Name: {} s/o {} | Email: {}'.format(datetime.now(),datetime.now(),customername.get(),fathername.get(),emailid.get()))
    Label(billwin, text='Description of Goods',font=('Arial',12),borderwidth=1,relief='solid',width=50).grid(row=5,column=1)
    Label(billwin, text='Quantity',font=('Arial',12),borderwidth=1,relief='solid',width=10).grid(row=5,column=2)
    Label(billwin, text='Rate',font=('Arial',12),borderwidth=1,relief='solid',width=10).grid(row=5,column=3)
    Label(billwin, text='Amount',font=('Arial',12),borderwidth=1,relief='solid',width=10).grid(row=5,column=4)
    Label(billwin, text='{} {}'.format('TVS',model.get()), font=('Arial',12),height=5,width=50,borderwidth=1,relief='solid',anchor=N).grid(row=6,column=1)
    Label(billwin, text='{} {}'.format(qty.get(),model.get()), font=('Arial',12),borderwidth=1,relief='solid',height=5,width=10,anchor=N).grid(row=6,column=2)
    Label(billwin, text='{} {}'.format(mddict[model.get()],qty.get()), font=('Arial',12),borderwidth=1,relief='solid',height=5,width=10,anchor=N).grid(row=6,column=3)
    Label(billwin, text='TOTAL AMOUNT',font=('Arial',12),borderwidth=1,relief='solid',height=2,width=71,anchor=CENTER).grid(row=7,column=1)
    Label(billwin, text='{} {}'.format(mddict[model.get()],qty.get()), font=('Arial',12),borderwidth=1,relief='solid',height=2,width=10,anchor=CENTER).grid(row=7,column=2)

Button(win , text='SUBMIT', command=datasend).grid(row=14,column=1)
Button(win , text='BILL', command=new_window).grid(row=14,column=2)

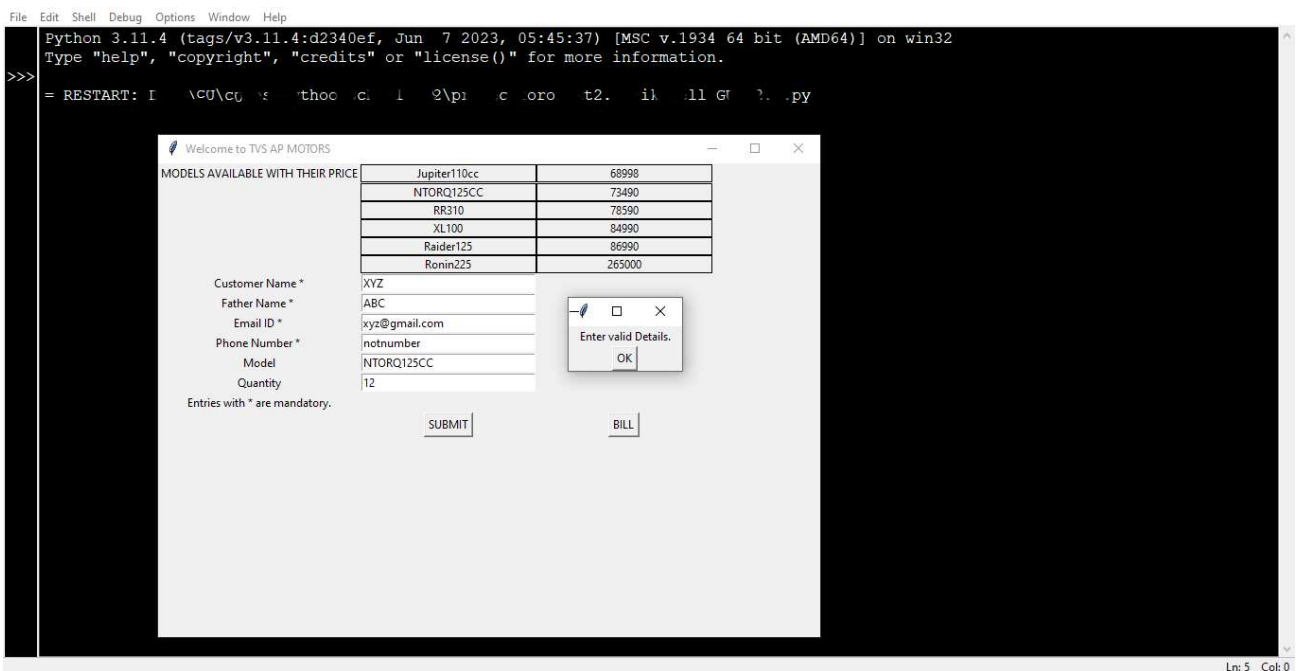
mainloop()
```

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# OUTPUT



## Entry Form (by Tkinter)



## Error Window

```
File Edit Shell Debug Options Window Help
Python 3.11.4 (tags/v3.11.4:d2340ef, Jun 7 2023, 05:45:37) [MSC v.1934 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: ... Python \src\I .2\p cect o. t2. oik ell J .0.py
Customer Father Email Model Price Quantity
0 1234567890 1234567890 1234567890 1234567890 1234567890
1 XYZ ABC xyz@gmail.com NTORQ125CC 73490 12

[2 rows x 6 columns]
```

Data stored in CSV file

File Edit Shell Debug Options Window Help

Python 3.11.4 (tags/v3.11.4:d2340ef, Jun 7 2023, 05:45:37) [MSC v.1934 64 bit (AMD64)] on win32

Welcome to TVS AP MOTORS

> MODELS AVAILABLE WITH THEIR PRICE

| Model        | Price  |
|--------------|--------|
| Jupiter110cc | 68998  |
| NTORQ125CC   | 73490  |
| RR310        | 78590  |
| XL100        | 84990  |
| Raider125    | 86990  |
| Ronin225     | 265000 |

Customer Name \*  
Father Name \*  
Email ID \*  
Phone Number \*  
Model  
Quantity

Entries with \* are mandatory.

SUBMIT BILL

BILL | AP MOTORS

**AP MOTORS**

XYZ Road, Jankipuram, Lucknow - 226220  
Email - apmotorslko@hotmail.com Contact - 0522-696969

Details of Customer  
Date: 2023-10-09 Time: 23:02:19  
Name: XYZ s/o ABC | Email: xyz@gmail.com

| Description of Goods | Quantity | Rate  | Amount |
|----------------------|----------|-------|--------|
| TVS NTORQ125CC       | 12       | 73490 | 881880 |
| TOTAL AMOUNT         |          |       | 881880 |

Bill with Date & Time

# **BIBLIOGRAPHY**

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- <https://www.geeksforgeeks.org/python-gui-tkinter/>
- <https://www.geeksforgeeks.org/python-pandas-dataframe/>
- <https://www.geeksforgeeks.org/python-datetime-module/>
- <https://www.w3schools.in/python/gui-programming>