

# LUCKNOW PUBLIC SCHOOL

(C. P. SINGH FOUNDATION)



## Project Report

### *Informatics Practices(065)*

(Session: 2023-24)

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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

## TEXT:

```
# 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(ro
w=i+1,column=1,columnspan=1)
    Label(win,text=mdlsprice[i],borderwidth=1,relief='solid',width=26).grid(ro
w=i+1,column=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(),'E
mail':emailid.get(),'Phone':int(phone.get()),'Model':model.get(),'Price':m
ddict[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"),c
ustomername.get(),fathername.get(),emailid.get()),font=('Arial',10),borderw
idth=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',widt
h=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()

```

## IDLE:

```

1 # imports
2 import pandas as pd
3 from tkinter import * #type: ignore
4 import tkinter as tk
5 from datetime import datetime
6
7
8
9 # window
10 win = Tk()
11 win.geometry('700x500')
12 win.title("Welcome to TVS AP MOTORS")
13 win.rowconfigure(index=15,weight=1)
14 win.columnconfigure(index=12,weight=1)
15
16 # form
17 customername = StringVar() # variable to store data entered.
18 fathername = StringVar()
19 emailid = StringVar()
20 phone = StringVar()
21 model = StringVar()
22 price = IntVar()
23 qty = IntVar()
24
25
26 mddict = {'Jupiter110cc': 68998,"NTORQ125CC": 73490,"RR310": 78590,"XL100": 84990,"Raider125": 86990,"Ronin225": 265000}
27 mdlssavail = ['Jupiter110cc','NTORQ125CC','RR310','XL100','Raider125','Ronin225']
28 mdlssprice=[68998,73490,78590,84990,86990,265000]
29
30 Label(win,text="MODELS AVAILABLE WITH THEIR PRICE").grid(row=1,column=0) # models available
31 for i in range(6):
32     Label(win,text=mdlssavail[i],borderwidth=1,relief='solid',width=26).grid(row=i+1,column=1,columnspan=1)
33     Label(win,text=mdlssprice[i],borderwidth=1,relief='solid',width=26).grid(row=i+1,column=2)

```

```

34
35 Label(win, text="Customer Name *").grid(row=7, column=0) # customer
36 Label(win, text="Father Name *").grid(row=8, column=0) # father
37 Label(win, text="Email ID *").grid(row=9, column=0) # email
38 Label(win, text="Phone Number *").grid(row=10, column=0) # phone
39 Label(win, text="Model").grid(row=11, column=0) # bike model
40 Label(win, text="Quantity").grid(row=12, column=0) # qty
41 Label(win, text='Entries with * are mandatory.').grid(row=13, column=0) # warning
42
43
44 Entry(win, width=30, textvariable=customername).grid(row=7, column=1) # customer entry
45 Entry(win, width=30, textvariable=fathername).grid(row=8, column=1) # father entry
46 Entry(win, width=30, textvariable=emailid).grid(row=9, column=1) # email entry
47 Entry(win, width=30, textvariable=phone).grid(row=10, column=1) # phone entry
48 Entry(win, width=30, textvariable=model).grid(row=11, column=1) # model entry
49 Entry(win, width=30, textvariable=qty).grid(row=12, column=1) # qty entry
50
51
52 # pandas
53 def datasend():
54     df = pd.read_csv("D:\\ASHU\\codes\\Python\\school\\c12\\project\\project2.0\\bikepurchaseDB.csv")
55     # entries = [customername.get(), fathername.get(), emailid.get(), phone.get(), company.get(), model.get(), price.get()]
56     if model.get() in mdlsavail and phone.get().isnumeric() == True:
57         entrydict = {'Customer': customername.get(), 'Father': fathername.get(), 'Email': emailid.get(), 'Phone': int(phone.get()), 'Model': model.get(), 'Price': price.get()}
58         df.loc[len(df.index)] = entrydict
59     else:
60         errorwin = Tk()
61         Label(errorwin, text='Enter valid Details.').pack()
62         Button(errorwin, text='OK', command=errorwin.destroy).pack()
63         errorwin.mainloop()
64     # dfnew = pd.DataFrame(entrydict)
65     # df = df.add(dfnew)
66     df.to_csv("D:\\ASHU\\codes\\Python\\school\\c12\\project\\project2.0\\bikepurchaseDB.csv", index=False)

```

```

66     df.to_csv("D:\\ASHU\\codes\\Python\\school\\c12\\project\\project2.0\\bikepurchaseDB.csv", index=False)
67     print(df)
68
69 # vals = [customername, fathername, emailid, phone, company, model, price]
70 # new window
71 def new_window():
72     billwin = Toplevel(win)
73     billwin.columnconfigure(index=5, weight=1)
74     billwin.rowconfigure(index=7, weight=1)
75     billwin.title('BILL | AP MOTORS')
76     Label(billwin, text='AP MOTORS', font=('Algerian', 36)).grid(row=1, column=1, columnspan=3)
77     Label(billwin, text='XYZ Road, Jankipuram, Lucknow - 226220', font='Arial').grid(row=2, column=1, columnspan=3)
78     Label(billwin, text='Email - apmotorslko@hotmail.com Contact - 0522-696969', font='Arial').grid(row=3, column=1, columnspan=3)
79     Label(billwin, text='Details of Customer Date: {} Time: {} \n Name: {} s/o {} | Email: {}'.format(datetime.now().strftime('%Y-%m-%d %H:%M'), datetime.now().strftime('%Y-%m-%d %H:%M'), customername.get(), fathername.get(), emailid.get(), phone.get())).grid(row=4, column=1, columnspan=3)
80     Label(billwin, text='Description of Goods', font='Arial', 12, borderwidth=1, relief='solid', width=50).grid(row=5, column=1)
81     Label(billwin, text='Quantity', font='Arial', 12, borderwidth=1, relief='solid', width=10).grid(row=5, column=2)
82     Label(billwin, text='Rate', font='Arial', 12, borderwidth=1, relief='solid', width=10).grid(row=5, column=3)
83     Label(billwin, text='Amount', font='Arial', 12, borderwidth=1, relief='solid', width=10).grid(row=5, column=4)
84     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)
85     Label(billwin, text='{} {}'.format(qty.get(), price.get()), font='Arial', 12, borderwidth=1, relief='solid', height=5, width=10, anchor=N).grid(row=6, column=2)
86     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)
87     Label(billwin, text='{} {}'.format(mddict[model.get()], price.get()), font='Arial', 12, borderwidth=1, relief='solid', height=5, width=10, anchor=N).grid(row=6, column=4)
88     Label(billwin, text='TOTAL AMOUNT', font='Arial', 12, borderwidth=1, relief='solid', height=2, width=71, anchor=CENTER).grid(row=7, column=1)
89     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)
90
91
92
93 Button(win, text='SUBMIT', command=datasend).grid(row=14, column=1)
94 Button(win, text='BILL', command=new_window).grid(row=14, column=2)
95
96
97 mainloop()
98

```

# OUTPUT

```
Python 3.12.0 (tags/v3.12.0:0fb18b0, Oct 2 2023, 13:03:39) [MSC v.1935 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: D:\ASHU\codes\Python\schooll\c12\project\project2.0\bikesell GUI 2.0.py
```

Welcome to TVS AP MOTORS

MODELS AVAILABLE WITH THEIR PRICE

Jupiter110cc	68998
NTORQ125CC	73490
RR310	78590
XL100	84990
Raider125	86990
Ronin225	265000

Customer Name \*

Father Name \*

Email ID \*

Phone Number \*

Model

Quantity

0

Entries with \* are mandatory.

SUBMIT BILL

## Entry Form (by Tkinter)

```
Python 3.12.0 (tags/v3.12.0:0fb18b0, Oct 2 2023, 13:03:39) [MSC v.1935 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: D:\ASHU\codes\Python\schooll\c12\project\project2.0\bikesell GUI 2.0.py
```

Welcome to TVS AP MOTORS

MODELS AVAILABLE WITH THEIR PRICE

Jupiter110cc	68998
NTORQ125CC	73490
RR310	78590
XL100	84990
Raider125	86990
Ronin225	265000

Customer Name \* abcd

Father Name \* pqrs

Email ID \* abcdpqrs123@gmail.com

Phone Number \* notanumber

Model NTORQ125CC

Quantity 12

Entries with \* are mandatory.

SUBMIT BILL

tk Enter valid Details. OK

## Error Window

```
Python 3.12.0 (tags/v3.12.0:0fb18b0, Oct 2 2023, 13:03:39) [MSC v.1935 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
```

```
>>>
```

```
= RESTART: D:\ASHU\codes\Python\school\c12\project\project2.0\bikesell GUI 2.0.py
Customer Father      Email ...      Model Price Quantity
0 Ashutosh Shyam prajapatiashu77@gmail.com ... Raider125 86990 5
1 abcd pqr abcdpqr123@gmail.com ... NTORQ125CC 73490 12
```

```
[2 rows x 7 columns]
```

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 \* abcd

Father Name \* pqr

Email ID \* abcdpqr123@gmail.com

Phone Number \* 1234567869

Model NTORQ125CC

Quantity 12

Entries with \* are mandatory.

SUBMIT BILL

## Data stored in CSV file

BILL | AP MOTORS

**AP MOTORS**

XYZ Road, Jankipuram, Lucknow - 226220

Email - apmotorslko@hotmail.com Contact - 0522-696969

Details of Customer Date: 2023-11-23 Time: 08:39:01  
Name: abcd s/o pqr | Email: abcdpqr123@gmail.com

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

Phone Number \*  
Model  
Quantity

Entries with \* are mandatory.

SUBMIT BILL

MODELS AVAILABLE WITH THEIR PRICE

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

Customer Name \* abcd

Father Name \* pqr

Email ID \* abcdpqr123@gmail.com

Phone Number \* 1234567869

Model NTORQ125CC

Quantity 12

Entries with \* are mandatory.

SUBMIT BILL

## Bill with Date & Time

## SOFTWARE REVIEW FORM

Name of Reviewer: Atharv Srivastava	Name of Developer: Ashutosh Prajapati
Profession/Education Level: Btech.	Class: 12
Age:19	Section: A

Language used in the project: **Python**

Topic of project	Bike Showroom Management System
Your views about it	Simple, Easy to use, No Errors and a good GUI
Was the program easy to use?	Yes
Any flaws?	No
What could have made it better?	Option to search for past purchases
Is the language used clearly indicated?	Yes
Was the developer able to solve your queries?	Yes
Rate the software	A

  
**Sign of Reviewer:**.....

**Sign of Teacher:**.....

# **BIBLIOGRAPHY**

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