EASWARI ENGINEERING COLLEGE

(AUTONOMOUS)

DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

MINI PROJECT

AIRLINE RESERVATION SYSTEM

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Batch Number: 2

Subject Code: 191GES111L

Subject Name: Problem solving through python programming

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INTRODUCTION TO PYTHON:

Python is a high-level, interpreted programming language that was first released in 1991 by Guido van Rossum. It has since become one of the most popular programming languages due to its simple and easy-to-learn syntax, readability, and versatility.

Python is an object-oriented language that supports a wide range of programming paradigms, including procedural, functional, and imperative programming. It has a large standard library that provides a range of useful modules for tasks such as file I/O, regular expressions, and networking.

Python is widely used in a variety of industries, including web development, data science, machine learning, automation, and more. Its popularity in these fields can be attributed to the fact that it is easy to learn, has a large and supportive community, and provides powerful tools for solving complex problems.

One of the key advantages of Python is its readability. Python code is easy to read and understand, even for those who are new to programming. This makes it a great language for beginners who are just starting to learn how to code.

Key Features of Python:

1. Simple and easy-to-learn syntax: Python has a simple and easy-to-learn syntax, which makes it a great language for beginners. It uses indentation instead of braces to denote code blocks, making it easy to read and understand.
2. Interpreted language: Python is an interpreted language, which means that it does not need to be compiled before running. This makes it easy to use and develop in a rapid prototyping environment.
3. Large standard library: Python comes with a large standard library that provides many useful modules for tasks such as file I/O, regular expressions, networking, and more. This makes it easy to perform many common tasks without having to write your own code.
4. Object-oriented programming: Python is an object-oriented language, which means that it supports classes and objects. This allows for the creation of reusable code and the use of inheritance and polymorphism.
5. Dynamically typed: Python is a dynamically typed language, which means that variable types are determined at runtime. This makes it easy to write and read code, as you do not have to worry about specifying variable types.

AIRLINE

RESERVATION

SYSTEM

OBJECTIVE:

To provide a comprehensive overview of a software application that facilitates the management of flight bookings and reservations for an airline company. The report should outline the purpose, goals, and scope of the project, as well as provide details on the design, development, and implementation of the system.

The primary objectives of an airline reservation system project report include:

1. To describe the functional requirements of the system, including features such as flight search, seat selection, and payment processing.
2. To outline the technical architecture of the system, including details on the database design, user interface, and integration with external systems

DESCRIPTION:

The System consists of basic requirements for a Graphical Interface to perform certain tasks related to Airline management in terms of reservation of Flights

The System can store the data given by the user regarding his Departure and personal Details for necessary arrangements needed. We use Python's GUI tkinter to create this Graphical Interface. We use a series of Labels and Entries in order to get information from the User and move to the next set of Operations using a Button to Navigate.

We use various predefined functions of tkinter for various operations such as font, text for Labels; title, geometry, place, pad**x**, pad**y** for alignment; get to declare inputs from the user, etc.

Buttons are used to move from one interface to another by defining it as a function. Last display all the values or inputs given by the user to confirm their booking and close the interface

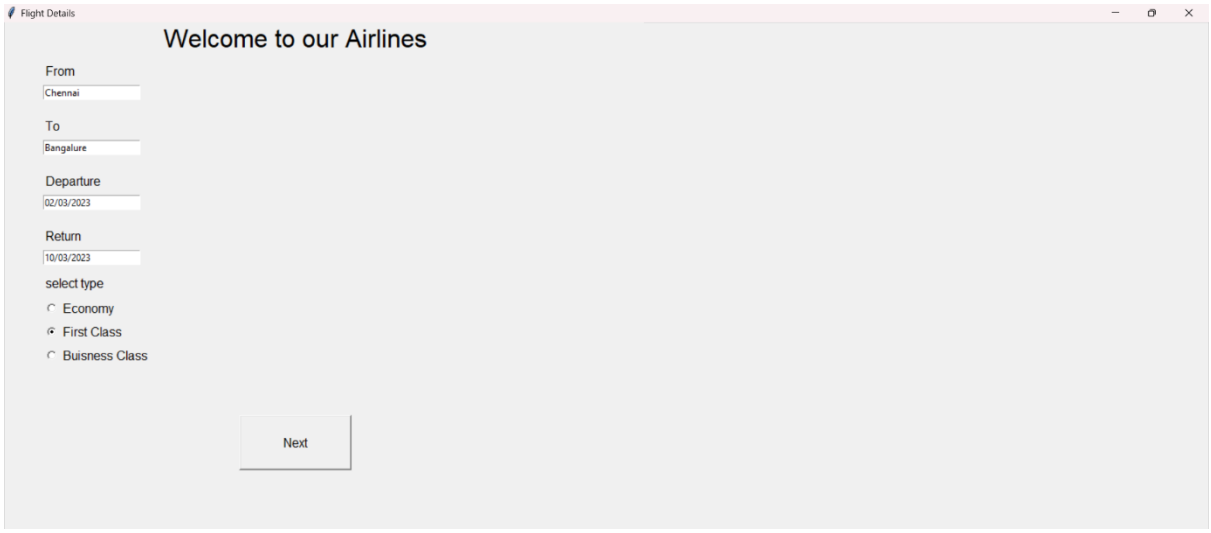
SAMPLE CODING:

```
from tkinter import *
root=Tk()
root.title("Flight Details")
root.geometry("800x600+0+0")
#INTERFACE!!
##   X = label
##   E = entry
x1 = Label(root,text="Welcome to our
Airlines",font=("Helvetica",24)).place(x=200,y=0)
x2 = Label(root,text="From",font=24).place(x=50,y=50)
E1 = Entry(root)
E1.place(x=50,y=80)
x3 = Label(root,text="To",font=24).place(x=50,y=120)
E2 =Entry(root)
E2.place(x=50,y=150)
x4 =Label(root,text="Departure",font=24).place(x=50,y=190)
E3 =Entry(root)
E3.place(x=50,y=220)
x5 =Label(root,text="Return",font=24).place(x=50,y=260)
E4 =Entry(root)
E4.place(x=50,y=290)

x6 =Label(root,text="select type",font=24).place(x=50,y=320)
R1=Radiobutton(root,text="Economy",value=1,font=24).place(x=50,y=350)
R2=Radiobutton(root,text="First Class",value=2,font=24).place(x=50,y=380)
R3=Radiobutton(root,text="Buisness
Class",value=3,font=24).place(x=50,y=410)


def book_flight():
    global phone
    booking_window = Tk()
    booking_window.title("Booking Details")
    booking_window.geometry("600x600")

    name_label =Label(booking_window, text="Name :
",font=24).place(x=50,y=80)
    name_entry = Entry(booking_window)
    name_entry.place(x=50,y=115)
    name=name_entry.get()

    Age_label =Label(booking_window,text="Age :
",font=24).place(x=50,y=145)
    Age_entry = Entry(booking_window)
    Age_entry.place(x=50,y=175)
    address_label =Label(booking_window,text="Address :
",font=24).place(x=50,y=205)
    address_entry =Entry(booking_window)
    address_entry.place(x=50,y=235)
    phone_no_label = Label(booking_window,text="Phone No :
",font=24).place(x=50,y=265)
    phone_no_entry =Entry(booking_window)
    phone_no_entry.place(x=50,y=295)
```

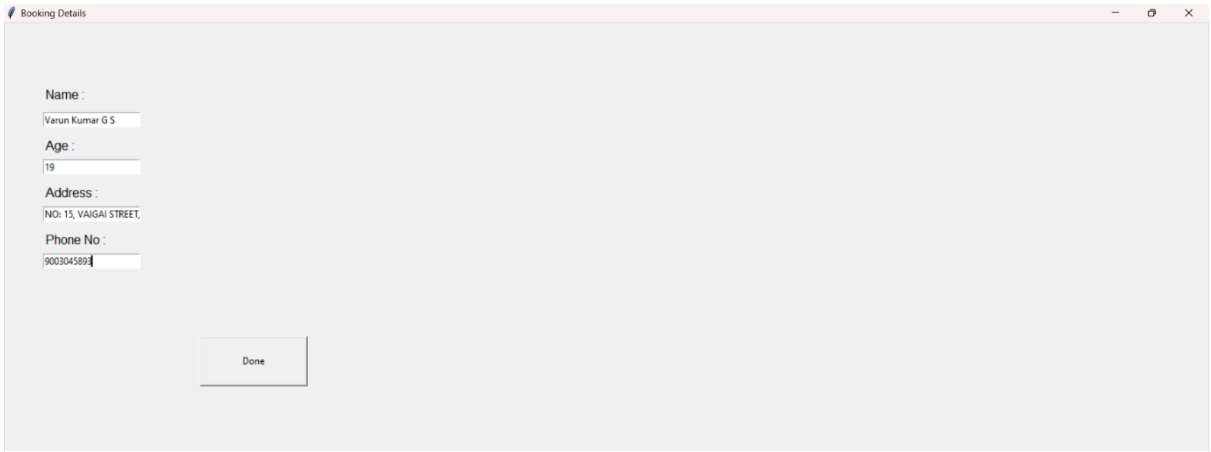
```
def FI():

            final_interface = Tk()
            final_interface.title("Your Details")
            final_interface.geometry("600x600")
            Label(final_interface,text="Name:
"+name_entry.get(),font=48).place(x=50,y=80)
            Label(final_interface,text="Age:
"+Age_entry.get(),font=48).place(x=50,y=120)
            Label(final_interface,text="Address:
"+address_entry.get(),font=48).place(x=50,y=160)
            Label(final_interface,text="Phone Num:
"+phone_no_entry.get(),font=48).place(x=50,y=200)
            Label(final_interface,text="From:
"+E1.get(),font=48).place(x=50,y=240)
            Label(final_interface,text="To:
"+E2.get(),font=48).place(x=50,y=280)
            Label(final_interface,text="Departure:
"+E3.get(),font=48).place(x=50,y=320)
            Label(final_interface,text="Return:
"+E4.get(),font=48).place(x=50,y=360)
            button =
Button(final_interface,text="Submit",font=48,command=final_interface.destro
y,padx=50,pady=20).place(x=250,y=400)
            TTk = Label(final_interface, text="Thank You For Choosing Us \n
Hope You Have A Wonderful Experience", font=("Helvetica", 24))
            TTk.pack(side="bottom")



    done_button = Button(booking_window, text="Done", command=FI, padx=50,
pady=20).place(x=250, y=400)


book_button =Button(root, text="Next",
command=book_flight,padx=50,pady=20,font=30).place(x=300,y=500)


root.mainloop()
```

Output Screenshots:

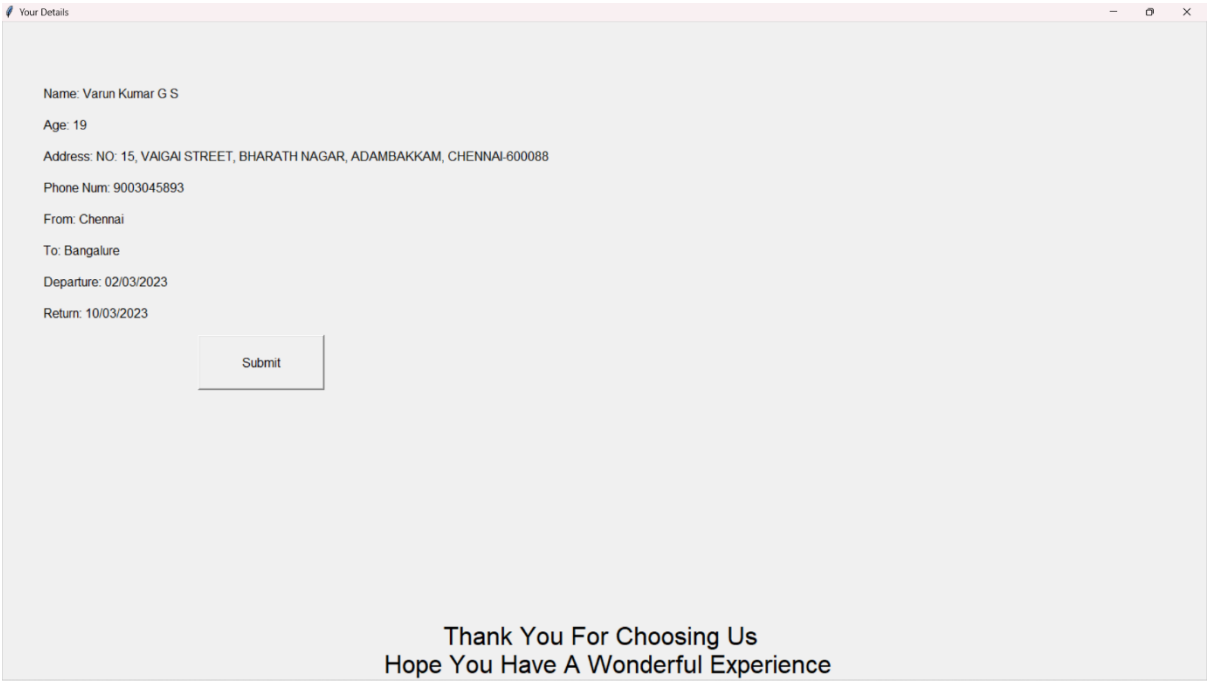
1.



2.



3.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Submit
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