

**Python Project Proposal**

**Jacky de Hotel**

**(Dog’s Hotel Booking System)**

**13006107 Introduction to Computers and Programming**

**Software Engineering Program**

**Faculty of Engineering, KMITL**

By

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This is a GUI program to book and calculate the price of all the services in the hotel according to what you choose for your dog. First, the program will introduce what our dog’s hotel is in the start page (Main Menu) , and then there are 2 options to choose. The first one is to Book a room and calculate the price and the second one is a Pet calculator which to calculate your dog's age to human's age.

In Book a room and calculate the price, you have to answer the questions about your dog below:

* Name
* Age(years)
* Gender
* Breed
* Size(small/medium/large)
* How long will your dog stay here (days)?
* Will you bring food with (yes/no)?
* Any salon and spa (included shower) (yes/no)?
* Any swimming (yes/no)?
* Do your dog need any special help?

In Pet calculator, you only have to enter your dog’s age then the program will calculate it to human age using this formula:

16 \* ln (age) +31

After answer everything, please press confirm button then the new window will pop up the output for each function depends on your choice.

**Source code:**

import os

import pickle

import time

from tkinter import\*

import tkinter.messagebox

import tkinter.ttk

import math

FONT= ("Courier New")

#main function to make pages switch

class main(Tk):

def \_\_init\_\_(self, \*args, \*\*kwargs):

Tk.\_\_init\_\_(self, \*args, \*\*kwargs)

container = Frame(self)

container.pack(side="top", fill="both", expand = True)

container.grid\_rowconfigure(0, weight=1)

container.grid\_columnconfigure(0, weight=1)

self.frames = {}

for F in (StartPage, PageOne, PageTwo):

frame = F(container, self)

self.frames[F] = frame

frame.grid(row=0, column=0, sticky="nsew")

self.show\_frame(StartPage)

def show\_frame(self, cont):

frame = self.frames[cont]

frame.tkraise()

class StartPage(Frame):

def \_\_init\_\_(self, parent, controller):

Frame.\_\_init\_\_(self,parent)

Frame.configure(self,bg='red')

label = Label(self, text = "JACKY DE HOTEL", font = ("Courier New" , 18 , "bold"))

label.pack(pady = 10, padx = 10)

label2 = Label(self, text = "Hello and Welcome to our hotel!!" , font = (FONT , 12))

label2.pack(pady = 10 , padx = 10)

label3 = Label(self, text = "This is a hotel for dogs where they can feel like home ^^" , font = (FONT , 12))

label3.pack(pady = 10 , padx = 10)

label4 = Label(self, text = "This is a program to calculate the price for every services from your choice and a Pet Calculator to calculate your dog's age to human's age." , font = (FONT , 12))

label4.pack(pady = 10 , padx = 10)

label5 = Label(self, text = "Please click these 2 buttons below to get started" , font = (FONT , 10))

label5.pack(pady = 10 , padx = 10)

button = Button(self, text="Book a room and calculate the price",

command=lambda: controller.show\_frame(PageOne))

button.pack(pady = 10 , padx = 10)

button2 = Button(self, text="Pet Calculator",

command=lambda: controller.show\_frame(PageTwo))

button2.pack(pady = 5 , padx = 10)

class PageOne(Frame):

def \_\_init\_\_(self, parent, controller):

Frame.\_\_init\_\_(self, parent)

Frame.configure(self,bg='blue')

label = Label(self, text = "Book a room and calculate the price", font = (FONT , 18 , "bold"))

label.pack(pady=10,padx=10)

label2 = Label(self, text = "Please enter your dog's information below" , font = (FONT , 10))

label2.pack(pady = 10 , padx = 10)

name = Label(self, text = "Name :", font = (FONT,12))

name.place(x = 100, y = 100)

Entry(self, justify = RIGHT).place(x = 250, y = 100)

age = Label(self, text = "Age(years) :", font = (FONT,12))

age.place(x = 100, y = 120)

Entry(self, justify = RIGHT).place(x = 250, y = 120)

breed = Label(self, text = "Breed :", font = (FONT,12))

breed.place(x = 100, y = 140)

Entry(self, justify = RIGHT).place(x = 250, y = 140)

size = Label(self, text = "Size :", font = (FONT,12))

size.place(x = 100, y = 160)

strvar = StringVar(value = 0)

radio1 = Radiobutton(self, text = "Small" , variable = strvar , value = 'Small')

radio1.place(x = 250,y = 160)

radio2 = Radiobutton(self, text = "Medium" , variable = strvar , value = 'Medium')

radio2.place(x = 300,y = 160)

radio3 = Radiobutton(self, text = "Large" , variable = strvar , value = 'Large')

radio3.place(x = 370,y = 160)

gender = Label(self, text = "Gender :", font = (FONT,12))

gender.place(x = 100, y = 180)

strvar2 = StringVar(value = 0)

radio4 = Radiobutton(self, text = "Male" , variable = strvar2 , value = 'Male')

radio4.place(x = 250,y = 180)

radio5 = Radiobutton(self, text = "Female" , variable = strvar2 , value = 'Female')

radio5.place(x = 300,y = 180)

period = Label(self, text = "How long will your dog stay here?(days):", font = (FONT,12))

period.place(x = 100, y = 200)

self.money = StringVar()

days = Entry(self, justify = RIGHT,textvariable = self.money).place(x = 550, y = 200)

food = Label(self, text = "Will you bring food with? :", font = (FONT,12))

food.place(x = 100, y = 220)

strvar3 = StringVar(value = 0)

radio6 = Radiobutton(self, text = "Yes" , variable = strvar3 , value = 'Yes')

radio6.place(x = 550,y = 220)

radio7 = Radiobutton(self, text = "No" , variable = strvar3 , value = 'No')

radio7.place(x = 590,y = 220)

spa = Label(self, text = "Any salon and spa(included shower)? :", font = (FONT,12))

spa.place(x = 100, y = 240)

strvar4 = StringVar(value = 0)

radio8 = Radiobutton(self, text = "Yes" , variable = strvar4 , value = 'Yes')

radio8.place(x = 550,y = 240)

radio9 = Radiobutton(self, text = "No" , variable = strvar4 , value = 'No')

radio9.place(x = 590,y = 240)

swim = Label(self, text = "Any swimming? :", font = (FONT,12))

swim.place(x = 100, y = 260)

strvar5 = StringVar(value = 0)

radio10 = Radiobutton(self, text = "Yes" , variable = strvar5 , value = 'Yes')

radio10.place(x = 550,y = 260)

radio11 = Radiobutton(self, text = "No" , variable = strvar5 , value = 'No')

radio11.place(x = 590,y = 260)

need = Label(self, text = "Do your dog need any special help? :", font = (FONT,12))

need.place(x = 100, y = 280)

Entry(self, justify = RIGHT).place(x = 550, y = 285)

note = Label(self, text = "Note : Any special services are included in the price per each day", font = (FONT,12))

note.place(x = 100, y = 310)

confirm = Button(self, text = "Confirm", command = self.calculate)

confirm.pack(pady = 280 , padx = 10)

button1 = Button(self, text="Back to Main Menu",

command=lambda: controller.show\_frame(StartPage))

button1.pack(pady = 10 , padx = 10)

button2 = Button(self, text="Pet Calculator",

command=lambda: controller.show\_frame(PageTwo))

button2.pack(pady = 10 , padx = 10)

def calculate(self) :

if self.money.get().isdigit() == True:

total = int(self.money.get())

show = "Thank you ,Successfully booked!!!\nTotal is " + str(format("%d" % (total \* 300))) + " baht."

tkinter.messagebox.showinfo("Confirm", show)

else:

self.inputError()

def inputError(self):

tkinter.messagebox.showinfo("Error","Please try again")

class PageTwo(Frame):

def \_\_init\_\_(self, parent, controller):

Frame.\_\_init\_\_(self, parent)

Frame.configure(self,bg='yellow')

label = Label(self, text="Pet Calculator", font = (FONT , 18 , "bold"))

label.pack(pady=10,padx=10)

label2 = Label(self, text = "Please enter your dog's age below" , font = (FONT , 10))

label2.pack(pady = 10 , padx = 10)

age = Label(self, text = "Age(years) :", font = (FONT,12))

age.place(x = 100, y = 100)

self.years = StringVar()

days = Entry(self, justify = RIGHT,textvariable = self.years).place(x = 250, y = 100)

confirm = Button(self, text = "Confirm", command = self.calculate)

confirm.pack(pady = 100 , padx = 10)

button1 = Button(self, text="Back to Main Menu",

command=lambda: controller.show\_frame(StartPage))

button1.pack(pady = 10 , padx = 10)

button2 = Button(self, text="Book a room and calculate the price",

command=lambda: controller.show\_frame(PageOne))

button2.pack(pady = 10 , padx = 10)

def calculate(self) :

if self.years.get().isdigit() == True:

age = float(self.years.get())

show = "Your dog is " + str(format("%.2f" % (16 \* math.log(age) + 31))) + " years old."

tkinter.messagebox.showinfo("Confirm", show)

else:

self.inputError()

def inputError(self):

tkinter.messagebox.showinfo("Error","Please enter only integer")

window = main()

window.title("Jacky de hotel")

window.geometry('700x400')

window.mainloop()





