from tkinter import \* # Import tkinter

import tkinter as ttk

from PIL import ImageTk, Image # Usage of PIL to import GW Logo

class ShoppingCart:

def \_\_init\_\_(self):

window = Tk() # Create a window

window.title("Glamping World Shopping Cart") # Set title of a window

window.geometry("485x450") # Set dimensions of window

window.configure(background = 'white') # Set color of window

self.Yes = IntVar() # Assign int variable for 'Yes' checkbutton

# Assign variables for drop down boxes

tkvar = StringVar(window)

tkvar2 = StringVar(window)

# Set up drop down boxes for the shopping cart in the left column of the window, align labels left (Sticky=W)

choices = {'Sleeping Bag - $15.00', "Lantern - $10.00", "Tent - $20.00", "Kayak - $25.00"}

tkvar.set('Choose Product')

popupMenu = OptionMenu(window, tkvar, \*choices)

Label(window, text = "Choose Product", font = 'Times 10 bold', bg='white').grid(row = 2, column = 1, sticky = W)

popupMenu.grid(row = 2, column = 3)

choices2 = {"Hiking Boots - $12.00", "Rain Jacket - $11.00"}

tkvar2.set('Choose Product')

popupMenu = OptionMenu(window, tkvar2, \*choices2)

Label(window, text = "Choose Discounted Product", font = 'Times 10 bold', bg='white').grid(row = 5, column = 1, sticky = W)

popupMenu.grid(row = 5, column = 3)

# Set up entry labels for the shopping cart in the left column of the window, align labels left (Sticky=W), and align entry boxes right (Sticky=E)

Label(window, text = "Quantity", font = 'Times 10 bold', bg='white').grid(row = 3, column = 1, sticky = W)

self.Quantity = IntVar()

Entry(window, textvariable = self.Quantity, justify = RIGHT).grid(row = 3, column = 3, sticky = E)

Label(window, text = "Customer ID", font = 'Times 10 bold', bg='white').grid(row = 1, column = 1, sticky = W)

self.CustomerID = StringVar()

Entry(window, textvariable = self.CustomerID, justify = RIGHT).grid(row = 1, column = 3, sticky = E)

Label(window, text = "Price of Product ($)", font = 'Times 10 bold', bg='white').grid(row = 4, column = 1, sticky = W)

self.Price = StringVar()

Entry(window, textvariable = self.Price, justify = RIGHT).grid(row = 4, column = 3, sticky = E)

Label(window, text = 'Quantity', font = 'Times 10 bold', bg='white').grid(row=6, column = 1, sticky = W)

self.Quantity2 = IntVar()

Entry(window, textvariable = self.Quantity2, justify = RIGHT).grid(row=6, column = 3, sticky = E )

Label(window, text = "Price of Product ($)", font = 'Times 10 bold', bg='white').grid(row = 7, column = 1, sticky = W)

self.Price2 = StringVar()

Entry(window, textvariable = self.Price2, justify = RIGHT).grid(row = 7, column = 3, sticky = E)

# Set up output labels for the shopping cart in the left column of the window, align labels left (Sticky=W)

Label(window, text = "Discount (2% for item in stock over 120 days)", font = 'Times 10 bold', bg='white').grid(row = 8, column = 1, sticky = W)

Label(window, text = "Sales Tax 13% ($)", font = 'Times 10 bold', bg='white').grid(row = 10 , column = 1, sticky = W)

Label(window, text = "SubTotal ($)", font = 'Times 10 bold', bg='white').grid(row = 9, column = 1, sticky = W)

Label(window, text = "Total Order Cost ($)", font = 'Times 10 bold', bg='white').grid(row = 11, column = 1, sticky = W)

#set up the output area for the shopping cart, using three labels, a check button; the check button calls the function Yes which applies a 2% discount to the order, and a button; the button calls the function computePayment when it's clicked

self.SalesTax = StringVar()

Label(window, textvariable = self.SalesTax, bg='white').grid(row = 10, column = 3, sticky = E)

self.SubTotal = StringVar()

Label(window, textvariable = self.SubTotal, bg='white').grid(row = 9, column = 3, sticky = E)

self.TotalCost = StringVar()

Label(window, textvariable = self.TotalCost, bg='white').grid(row = 11, column = 3, sticky = E)

self.Discount = StringVar()

Label(window, textvariable = self.Discount, bg='white').grid(row = 8, column = 3, sticky = E)

Button(window, width = 15, text="Help?", font = 'Times 11 bold', bg="Yellow").grid(row=12, column = 1, sticky= W) #help button

Button(window, width = 15, text = "Compute Payment", font = 'Times 11 bold', bg="cornsilk1", command = self.computePayment).grid(row = 12, column = 3, sticky = E) #Compute payment button

photo = PhotoImage(file="P:\GWlogo.gif") #Glamping World GIF

imglabel = Label(window, image=photo).grid(row = 0, column = 1)

window.mainloop() # Create an event loop to display the window

def computePayment(self):

Discount = float(self.Price2.get()) \* int(self.Quantity2.get()) \* .02 #Calculate Discount

self.Discount.set(format(Discount, '10.2f')) #Output Discount amount

SalesTax = float(self.Price.get()) \* int(self.Quantity.get()) \* .13 + float(self.Price2.get()) \* int(self.Quantity2.get()) \* .13 #Calculate SalesTax

self.SalesTax.set(format(SalesTax, '10.2f')) #Output SalesTax amount formatted to two decimal places

SubTotal = float(self.Price.get()) \* int(self.Quantity.get()) + float(self.Price2.get()) \* int(self.Quantity2.get()) #Calculate SubTotal

self.SubTotal.set(format(SubTotal, '10.2f')) #Output SubTotal formatted to two decimal places

TotalCost = float(self.Price.get()) \* int(self.Quantity.get()) \* .13 + float(self.Price.get()) \* int(self.Quantity.get()) + float(self.Price2.get()) \* int(self.Quantity2.get()) \* .13 + float(self.Price2.get()) \* int(self.Quantity2.get()) - Discount #Calculate TotalCost

self.TotalCost.set(format(TotalCost, '10.2f')) #Output TotalCost formatted to two decimal places

ShoppingCart() # Create GUI