Project : Diabetes Diagnosis Application

Code:

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fromtkinter import*
def predict():
res="Patient's Name:"+str(var.get())
r1.config(text=res)
res1="Plasma glucose concentration:"+str(var1.get())
r2.config(text=res1)
res2="Diastolic blood pressure:"+str(var2.get())
r3.config(text=res2)
res3="Triceps skin fold thickness:"+str(var3.get())
r4.config(text=res3)
res4="Serum Insulin:"+str(var4.get())
r5.config(text=res4)
res5="Body Mass Index:"+str(var5.get())
r6.config(text=res5)
ifint(var1.get())>=70 and int(var1.get())<=180:
ifint(var2.get())>=80 and int(var2.get())<=140:
ifint(var3.get())>=10 and int(var3.get())<=50:
ifint(var4.get())>=15 and int(var4.get())<=276:
ifint(var5.get())>=10 and int(var5.get())<=50:
diag="Diagnosis suggests that patient does not suffers from diabetes"
d.config(text=diag)
else:
diag="Diagnosis suggests that patient does  suffers from diabetes but need to
take care about his BMI"
d.config(text=diag)
else:
diag="Diagnosis suggests that patient does suffers from diabetes but need to take
care about his serum insulin"
d.config(text=diag)
else:
diag="Diagnosis suggests that patient does  suffers from diabetes and needs to
take care of his skin fold thickness"
d.config(text=diag)
else:
diag="Diagnosis suggests that patient does  suffers from diabetes and needs to
take care of his blood pressure"
d.config(text=diag)
else:
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diag="Diagnosis suggests that patient does suffers from diabetes and needs to
take care of his glucose concentration"
d.config(text=diag)
def erase():
e1.delete(0,END)
e2.delete(0,END)
e3.delete(0,END)
e4.delete(0,END)
e5.delete(0,END)
e6.delete(0,END)
r1.destroy()
r2.destroy()
r3.destroy()
r4.destroy()
r5.destroy()
r6.destroy()
d.destroy()
root=Tk()
root.title("Diabetes Prediction Application")
label=Label(root,text="Patient's Details",font=("Bold",30))
label.grid(row=0,column=0)
label1=Label(root,text="Report Card",font=("Bold",30))
label1.grid(row=0,column=30)
l1=Label(root,text="Patien's Name:")
l1.grid(row=2,column=0)
var=StringVar()
e1=Entry(root,bd=5,textvariable=var)
e1.grid(row=2,column=1)
l2=Label(root,text="Plasma glucose concentration:")
l2.grid(row=3,column=0)
var1=IntVar()
e2=Entry(root,bd=5,textvariable=var1)
e2.grid(row=3,column=1)
l11=Label(root,text="(70-180 mg/dl)")
l11.grid(row=3,column=2)
l3=Label(root,text="Diastolic blood pressure:")
l3.grid(row=4,column=0)
var2=IntVar()
e3=Entry(root,bd=5,textvariable=var2)
e3.grid(row=4,column=1)
l12=Label(root,text="(80-140mm Hg)")
l12.grid(row=4,column=2)
l4=Label(root,text="Triceps skin fold thickness:")
l4.grid(row=5,column=0)
var3=IntVar()
e4=Entry(root,bd=5,textvariable=var3)
e4.grid(row=5,column=1)
l13=Label(root,text="(10-50mm)")
l13.grid(row=5,column=2)
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l5=Label(root,text="Serum insulin:")
l5.grid(row=6,column=0)
var4=IntVar()
e5=Entry(root,bd=5,textvariable=var4)
e5.grid(row=6,column=1)
l14=Label(root,text="(15-276mu U/ml)")
l14.grid(row=6,column=2)
l6=Label(root,text="Body Mass Index:")
l6.grid(row=7,column=0)
var5=IntVar()
e6=Entry(root,bd=6,textvariable=var5)
e6.grid(row=7,column=1)
l15=Label(root,text="(10-50)")
l15.grid(row=7,column=2)
b1=Button(root,text="SUBMIT",command=predict)
b1.grid(row=10,column=0,columnspan=2)
b2=Button(root,text="RESET",command=erase)
b2.grid(row=10,column=1,columnspan=2)
r1=Label(root)
r1.grid(row=2,column=30)
r2=Label(root)
r2.grid(row=3,column=30)
r3=Label(root)
r3.grid(row=4,column=30)
r4=Label(root)
r4.grid(row=5,column=30)
r5=Label(root)
r5.grid(row=6,column=30)
r6=Label(root)
r6.grid(row=7,column=30)
d=Label(root)
d.grid(row=8,column=30)
text=Text(root,height=5,width=50)
note="Disclamer:We have used PIMA Indians Diabetes dataset and we are not
claiming that the said diagnosis are 100% correct "
text.insert(END,note)
text.grid(row=9,column=30)
root.mainloop()
```

Output:

Patient's Details

Patien's Name:	Suyesh Chavan	
Plasma glucose concentration:	70	(70-180 mg/dl)
Diastolic blood pressure:	80	(80-140mm Hg)
Triceps skin fold thickness:	10	(10-50mm)
Serum insulin:	45	(15-276mu U/ml)
Body Mass Index:	10	(10-50)

SUBMIT RESET

Report Card

Patient's Name:Suyash Chavan

Plasma glucose concentration:70

Diastolic blood pressure:80

Triceps skin fold thickness:10

Serum Insulin:45

Body Mass Index:10

Diagnosis suggests that patient does not suffers from diabetes

Disclamer:We have used PIMA Indians Diabetes datas et and we are not claiming that the said diagnosis are 100% correct