

## Föreläsning 10

Grafisk användargränssnitt  
Med tkinter

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## Användbara länkar om Tkinter

- <http://effbot.org/tkinterbook/>
- <http://infohost.nmt.edu/tcc/help/pubs/tkinter>
- <http://openbookproject.net/py4fun/gui/tkPhone.html>

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## Tkinter

- Tkinter är en modul som innehåller klasser för grafisk användargränssnitt
- Bland annat finns följande klasser i Tkinter:

Button	Message
Canvas	Radiobutton
Checkbutton	Scale
Entry	Scrollbar
Frame	Text
Label	Listbox

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## Tkinter

```
from tkinter import *  
t=Tk()  
t.mainloop()
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## Button

```
from tkinter import *  
p = Tk()  
b= Button(p, text="click here!")  
b.pack()  
p.mainloop()
```

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## Canvas

```
from tkinter import *  
  
t = Tk()  
duk = Canvas(t)  
duk.create_line(10, 40, 100,100)  
duk.pack()  
t.mainloop()
```

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## CheckBox

```
from tkinter import *
master=Tk()
def check():
    print(var.get())
var = StringVar()
c = Checkbutton(
    master, text="Color image",variable=var,
    onvalue="RGB", offvalue="L",
    command=check )
c.pack()
master.mainloop()
```

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## RadioButton

```
from tkinter import *
master=Tk()
def check():
    print (v.get())
v = IntVar()
r=Radiobutton(master, text="Long",
    variable=v, value=1, command=check)
r2=Radiobutton(master, text="Small",
    variable=v, value=2, command=check)
r.pack(anchor=W)
r2.pack(anchor=W)
master.mainloop()
```

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## Entry

```
from tkinter import *
master=Tk()
var = StringVar()
var.set("JAHA")
e=Entry(master,textvariable=var)
e.insert(2,"hej")
e.pack()
master.mainloop()
```

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## Text

```
from tkinter import *

master=Tk()
t=Text(master)
t.insert(END,"HELLO")
t.pack()
mainloop()
```

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## Listbox

```
from tkinter import *
p = Tk()
lb = Listbox(p)
lb.insert(0,"hej")
lb.insert(END,"hej2")
lb.insert(0,"hej3")
lb.pack()
mainloop()
```

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## Label

Label är en widget för att kunna visa en textrad.

```
from tkinter import *
master = Tk()
l = Label(master, text="en rad text")
l.pack()
mainloop()
```

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## Message

Message är som Label med den skillnaden att den klara av att text med flera rader.

```
from tkinter import *
master = Tk()
m = Message(master, text="a short\n
message", width=30)
m.pack()
mainloop()
```

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## Frame

Frame är som en rektangulär region i fönstret. Används för att gruppera andra widget.

```
from tkinter import *
root=Tk()
root.geometry("100x200")
root.title("Min fina fonster")
f=Frame(root)
f.pack(side=LEFT)
mainloop()
```

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## Scrollbar

```
from tkinter import *
win = Tk()
scroll = Scrollbar(win, orient=VERTICAL)
select = Listbox(win,
    yscrollcommand=scroll.set, height=6)
scroll.config (command=select.yview)
scroll.pack(side=RIGHT, fill=Y)
select.pack(side=LEFT, fill=BOTH, expand=1)
for i in range(10):
    select.insert(i,"rad "+str(i))
win.mainloop()
```

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