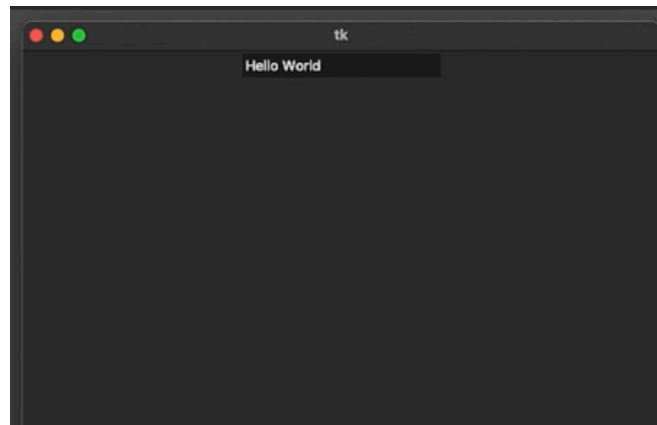


Py

Entry Widget

- This widget is useful for taking a single line text



- The options available for an entry widget are

Entry Options																	
show =	'*'																
validate =	focus, focusin, focusout, key, all, none																
validatecommand =	<table><tr><td>'%d'</td><td>0 deletion, 1 for insertion</td></tr><tr><td>'%i'</td><td>Index of insert or delete</td></tr><tr><td>'%P'</td><td>Text after change</td></tr><tr><td>'%s'</td><td>Text before change</td></tr><tr><td>'%S'</td><td>New text, insert or delete</td></tr><tr><td>'%v'</td><td>Value of validate option</td></tr><tr><td>'%W'</td><td>Reason of event</td></tr><tr><td>'%M'</td><td>Name of Widget</td></tr></table>	'%d'	0 deletion, 1 for insertion	'%i'	Index of insert or delete	'%P'	Text after change	'%s'	Text before change	'%S'	New text, insert or delete	'%v'	Value of validate option	'%W'	Reason of event	'%M'	Name of Widget
'%d'	0 deletion, 1 for insertion																
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'%v'	Value of validate option																
'%W'	Reason of event																
'%M'	Name of Widget																

- At times we want to use this widget as the Password widget where the user can type the text which should not be visible
- This can be done by using the **show** = “ * ” option, so when the user type the password * is shown instead of the text
- Usually we try to validate the content inside the entry widget in real time this can be done using **validate** and the options it take are focus, focusin, focusout, key, all, none
- You can mention when you want to validate 3

- It is necessary to have a handler in order to validate the contents inside the widget and using the `validatecommand` option we can achieve that
- Through the `validate` command we can know the current text, the new text typed after the text, for knowing this the control characters are mentioned above
- The Methods available in the entry widget are

Entry Methods

```
get()
insert(index, s)
delete(first, last=None)

icursor(index)
select_range(start, end)
select_to(index)
select_clear()
select_present()
```

- `get()` will give you the current content inside the entry widget
- `insert(index, s)` is used to insert any text in it
- `delete(first, last = None)` is used for deleting the existing text from the widget
- The remaining methods are useful for selecting the contents for instance
- To select text from the current cursor position **`select_to(index)`** is used
- To clear the selections we made, **`select_clear()`** is used
- We can also mention the range and do the selection, **`select_range(start,end)`**
- To position the cursor at a certain position **`icursor(index)`** is used

- Few Example of selection methods are

```
from tkinter import *

win = Tk()
win.geometry('600x400')

var1 = StringVar(value='Hello World')
ent1 = Entry(win, textvariable=var1)
ent1.pack()
ent1.focus()
ent1.insert(4)
ent1.select_range(2, 10)

win.mainloop()
```

- An example of **insertion** is given below

```
from tkinter import *

win = Tk()
win.geometry('600x400')

var1 = StringVar(value='Hello World')
ent1 = Entry(win, textvariable=var1)
ent1.pack()
ent1.insert(0, 'AATA')

win.mainloop()
```

- An example of **Deletion** is given below

```
from tkinter import *

win = Tk()
win.geometry('600x400')

var1 = StringVar(value='Hello World')
ent1 = Entry(win, textvariable=var1)
ent1.pack()
ent1.delete(0, 3)

win.mainloop()
```

- An example of making the widget as the password widget its given below

```
from tkinter import *

win = Tk()
win.geometry('600x400')

var1 = StringVar(value='Hello World')
ent1 = Entry(win, textvariable=var1, show='*')
ent1.pack()

win.mainloop()
```

- For validation we must mention **when** and **how** to validate the command

```
from tkinter import *

def myhandler(txt):
    if txt.isdigit():
        return False
    else:
        return True

win = Tk()
win.geometry('600x400')

handl = (win.register(myhandler), '%S')

var1 = StringVar(value='Hello World')
ent1 = Entry(win, textvariable=var1, validate='key', validatecommand=handl)
ent1.pack()

win.mainloop()
```