

[illegible]

```
1 import tkinter as tk
2 from tkinter import ttk
3 from tkcalendar import Calendar
4 from tkinter.scrolledtext import ScrolledText
5 from time import strftime
6
7 todos = {}
8
9 # key disini itu maksudnya tanggal
10 def addTodo(win, key, jam, menit, judul, keterangan):
11     newTodo = {
12         'waktu': '{}:{}'.format(jam.get(), menit.get()),
13         'judul': judul.get(),
14         'keterangan': keterangan.get('1.0', tk.END)
15     }
16     # mengecek apakah tanggal udh punya list atau belum
17     if key in todos:
18         todos[key].append(newTodo)
19     else:
20         todos[key] = [newTodo]
21     win.destroy()
22     ListTodo()
23
24 def ListTodo(cb=None):
25     for i in treev.get_children():
26         treev.delete(i)
27     tanggal = str(cal.selection_get())
28     if tanggal in todos:
29         # kenapa pake len, dia mengecek di todos itu mungkin sudah ada multiple kegiatan, jadi otomatis ngeprint semua
30         for i in range(len(todos[tanggal])): # menampilkan kegiatan yang sudah ditambahkan, ke dalam treeview
31             treev.insert("", "end", text=i, values=(todos[tanggal][i]['waktu'], todos[tanggal][i]['judul']))
32
33 def delTodos():
34     tanggal = str(cal.selection_get())
35     selected_item = treev.focus() # Meng-assign treeview yang di klik
36     todos[tanggal].pop(treew.item(selected_item)['text']) # text disini isinya index listnya yg kita buat di ListTodo()
37     ListTodo()
38
39 def SaveTodos():
40     f = open('pytodo.dat', 'w')
41     f.write(str(todos))
42     f.close()
43
44 def LoadTodos():
45     global todos
46     f = open('pytodo.dat', 'r')
47     data = f.read()
48     f.close()
49     todos = eval(data) # data bisa langsung di konversi ke dict
50     ListTodo()
51
```

```
52 def detailTodos(cb=None):
53     win = tk.Toplevel()
54     win.wm_title("Detail Kegiatan")
55     win.configure(bg='orange')
56     tanggal = str(cal.selection_get())
57     # Atur biar value nya sesuai yg di klik
58     selected_item = treew.focus()
59     selected_index = treew.item(selected_item)['text'] # Index disini tuh index list yang ada dalam dictionary
60     selected_todo = todos[tanggal][selected_index] # Ngassign list yang dipilih
61     # Bikin widget nya
62     judul = tk.StringVar(value=selected_todo['judul'])
63     tk.Label(win, text='Tanggal', font="Poppins 12 bold", background='orange', foreground='white').grid(row=0, column=0, sticky='W')
64     tk.Label(win, font="Poppins 12", background='orange', foreground='white', text='{} | {}'.format(tanggal, selected_todo['waktu'])).grid(row=0, column=1, sticky='W')
65     tk.Label(win, text='Judul', font="Poppins 12 bold", background='orange', foreground='white').grid(row=1, column=0, sticky='W')
66     # Maksud disabled disini jadi buat field tk.Entry menjadi read only
67     tk.Entry(win, state="disabled", textvariable=judul).grid(row=1, column=1, sticky='W')
68     tk.Label(win, text='Keterangan:', font="Poppins 12 bold", background='orange', foreground='white').grid(row=2, column=0, sticky='W')
69     keterangan = ScrolledText(win, width=12, height=5) # Bikin scroll
70     keterangan.grid(row=2, column=1, sticky='W')
71     keterangan.insert(tk.INSERT, selected_todo['keterangan']) # Ambil value keterangan dari dict
72     keterangan.configure(state='disabled') # Buat field jadi read only
```

Mengganti warna background, font, warna font, dan layout huruf jadi rata kiri di window detail kegiatan.

```
75 def AddForm():
76     win = tk.Toplevel()
77     win.wm_title("Tambah Kegiatan")
78     win.configure(bg='orange')
79     # Default Value dari jam, menit, dan judul
80     jam = tk.IntVar(value=10)
81     menit = tk.IntVar(value=30)
82     judul = tk.StringVar(value="")
83     # Buat label/teks untuk waktu terus dibuat spinbox nya
84     tk.Label(win, text='Waktu', font="Poppins 12 bold", background='orange', foreground='white').grid(row=0, column=0, sticky='W')
85     tk.Spinbox(win, from_=0, to=23, textvariable=jam, width=3).grid(row=0, column=1, sticky="W")
86     tk.Spinbox(win, from_=0, to=59, textvariable=menit, width=3).grid(row=0, column=2, sticky="W")
87     # Buat label/teks untuk judul dan dibuat box entry nya
88     tk.Label(win, text='Judul', font="Poppins 12 bold", background='orange', foreground='white').grid(row=1, column=0, sticky='W')
89     tk.Entry(win, textvariable=judul).grid(row=1, column=1, columnspan=3)
90     # Buat label/teks untuk keterangan
91     tk.Label(win, text='Keterangan:', font="Poppins 12 bold", background='orange', foreground='white').grid(row=2, column=0, sticky='W')
92     # Buat Scroll button untuk keterangan
93     keterangan = ScrolledText(win, width=12, height=5)
94     keterangan.grid(row=2, column=1, columnspan=2, rowspan=4)
95     tanggal = str(cal.selection_get())
96     # Buat button tambah dan panggil fungsi addTodo (command)
97     tk.Button(win, text="Tambah", font="Poppins 9 bold", bg="green", fg="white", command=lambda: addTodo(win, tanggal, jam, menit, judul, keterangan)).grid(row=3, column=1, sticky="W")
98
99 def title():
100     waktu = strftime('%H:%M')
101     tanggal = str(cal.selection_get())
102     root.title(tanggal + " | " + waktu + " | Calendar")
103     root.after(1000, title)
```

```
105 root = tk.Tk()
106 s = ttk.Style()
107 s.theme_use("clam")
108 s.configure('Treeview', rowheight=16, font='Poppins 9')
109 s.configure('Treeview.Hheading', font="Poppins 8")
110 root.title("Calendar")
```

Mengganti tema dan font treeview

```
112 cal = Calendar(root, font="Poppins 14 bold", selectmode="day", locale="id_ID", cursor="hand1", background="orange", disabledbackground="black", bordercolor="white",
113                 headersbackground="white", normalbackground="orange", foreground="white",
114                 normalforeground="white", headersforeground="black", weekendbackground="red", weekendforeground="white", firstweekdaybackground="red")
115
116 cal.grid(row=0, column=0, sticky="N", rowspan=14, columnspan=2)
117 cal.bind("<<CalendarSelected>>", ListTodo) # Binding ListTodo ke Tanggal yg di select
118 tanggal = str(cal.selection_get()) # Untuk masukkan tanggal yg di select ke variabel
```

Mengganti font, warna kalender, warna font, dan rowspan kalender

```
119 treew = ttk.Treeview(root)
120 treew.grid(row=15, column=0, sticky="WNES", rowspan=5, columnspan=2)
121
122 scrollbar = tk.Scrollbar(root, orient="vertical", command=treew.yview)
123 scrollbar.grid(row=15, column=2, sticky="ENS", rowspan=5)
124
```

Mengganti layout posisi treeview menjadi di bawah kalender

```
125 treew.configure(yscrollcommand=scrollbar.set)
126 treew.bind("<Double-1>", detailTodos) # Nge bind double click mouse1 utk ngejalanin fungsi detailTodos()
127 treew['columns'] = ("1", "2")
128 treew['show'] = 'headings'
129 treew.column("1", width=20) --> Ubah width jadi kecil
130 treew.heading("1", text="Jam")
131 treew.heading("2", text="Judul")
```

```
133 btnAdd = tk.Button(root, text="Tambah", width=20, command=AddForm, font="Poppins 10 bold", bg='green', fg='white')
134 btnAdd.grid(row=20, column=0, sticky='WNES')
135
136 btnDel = tk.Button(root, text="Hapus", width=20, command=delTodos, font="Poppins 10 bold", bg='red', fg='white')
137 btnDel.grid(row=21, column=0, sticky='WNES')
```

```
139 btnLoad = tk.Button(root, text="Load", width=20, command=LoadTodos, font="Poppins 10")
140 btnLoad.grid(row=21, column=1, sticky='WNES')
141
142 btnSave = tk.Button(root, text="Save", width=20, command=SaveTodos, font="Poppins 10")
143 btnSave.grid(row=20, column=1, sticky='WNES')
```

Mengganti font, warna font, warna button, dan layout posisi button

```
144 title()
145
146 root.mainloop()
```