

# Tkinter and Pandas 整合

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- ◆ Pandas進階用法
- ◆ GUI (前端使用者介面)與Pandas(後端資料的擷取) 的結合運用

# 範例說明

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讀取kaggle網站” Data Science Salaries 2023” csv檔案

依據該檔案的欄位建立GUI的查詢介面

請注意:需有該欄位才能提供GUI的查詢條件

# Example 1 of TreeView

```
import pandas as pd
from tkinter import ttk
import tkinter as tk
def Start():
    fp=pd.read_csv("countries.csv")
    for i in range(fp.shape[0]):
        tree.insert("", "end", value=tuple(fp.iloc[i,:].values))

win=tk.Tk()
ttk.Button(win, text="Import file",command=Start).pack()
columns=("country","year","population")

tree=ttk.Treeview(win,show="headings",columns=columns)
tree.column("country",width=100,anchor='center')
tree.column("year",width=100,anchor='center')
tree.column("population",width=200,anchor='center')
tree.heading("country",text="country")
tree.heading("year",text="year")
tree.heading("population",text="population")
tree.pack()

win.mainloop()
```

```
import tkinter as tk
from tkinter import ttk
from tkinter.messagebox import showinfo

root = tk.Tk()
root.title('Treeview demo')
root.geometry('620x200')

# define columns
columns = ('first_name', 'last_name', 'email')
tree = ttk.Treeview(root, columns=columns, show='headings')

# define headings
tree.heading('first_name', text='First Name')
tree.heading('last_name', text='Last Name')
tree.heading('email', text='Email')

# generate sample data
contacts = [] # a list of tuples
for n in range(1, 100):
    contacts.append(('first %d'%n, 'last %d'%n,
'email%d@example.com'%n))

# add data to the treeview
for contact in contacts:
    tree.insert("", tk.END, values=contact)
```

## Example 2 of TreeView

```
def item_selected(event):
    for selected_item in tree.selection():
        item = tree.item(selected_item)
        record = item['values']
        # show a message
        showinfo(title='Information', message='.'.join(record))

tree.bind('<<TreeviewSelect>>', item_selected)

tree.grid(row=0, column=0, sticky='nsew') # place the Treeview widget on the root window

# add a scrollbar
scrollbar = ttk.Scrollbar(root, orient=tk.VERTICAL, command=tree.yview)
tree.configure(yscroll=scrollbar.set)
scrollbar.grid(row=0, column=1, sticky='ns')

# run the app
root.mainloop()
```