import tkinter as tk

from tkinter import filedialog, messagebox

import threading

from sender import send\_file

from receiver import receive\_file

class UDPFileTransferApp:

def \_\_init\_\_(self, root):

self.root = root

self.root.title("UDP File Transfer Tool")

self.root.geometry("400x300")

# File selection

self.file\_path = tk.StringVar()

tk.Label(root, text="Select File to Send:").pack(pady=5)

tk.Entry(root, textvariable=self.file\_path, width=40).pack(padx=10)

tk.Button(root, text="Browse", command=self.browse\_file).pack(pady=5)

# IP and Port

tk.Label(root, text="Receiver IP:").pack(pady=5)

self.ip\_entry = tk.Entry(root)

self.ip\_entry.insert(0, "127.0.0.1")

self.ip\_entry.pack()

tk.Label(root, text="Port:").pack(pady=5)

self.port\_entry = tk.Entry(root)

self.port\_entry.insert(0, "5005")

self.port\_entry.pack()

# Buttons

tk.Button(root, text="Send File", command=self.send\_thread).pack(pady=10)

tk.Button(root, text="Receive File", command=self.receive\_thread).pack()

def browse\_file(self):

filename = filedialog.askopenfilename()

if filename:

self.file\_path.set(filename)

def send\_thread(self):

threading.Thread(target=self.send\_file, daemon=True).start()

def receive\_thread(self):

threading.Thread(target=self.receive\_file, daemon=True).start()

def send\_file(self):

filename = self.file\_path.get()

ip = self.ip\_entry.get()

port = int(self.port\_entry.get())

try:

send\_file(filename, ip, port)

messagebox.showinfo("Success", "File sent successfully!")

except Exception as e:

messagebox.showerror("Error", str(e))

def receive\_file(self):

save\_path = filedialog.asksaveasfilename(title="Save Received File As")

if not save\_path:

return

port = int(self.port\_entry.get())

try:

receive\_file(save\_path, port)

messagebox.showinfo("Success", "File received successfully!")

except Exception as e:

messagebox.showerror("Error", str(e))

if \_\_name\_\_ == "\_\_main\_\_":

root = tk.Tk()

app = UDPFileTransferApp(root)

root.mainloop()