import tkinter as tk

from tkinter import messagebox, ttk

import db\_handler

db\_handler.connect\_db()

# GUI Setup

app = tk.Tk()

app.title("Hostel Management System")

app.geometry("700x500")

# --- Room Management ---

def add\_room\_ui():

room\_no = room\_no\_entry.get()

capacity = capacity\_entry.get()

if room\_no.isdigit() and capacity.isdigit():

db\_handler.add\_room(int(room\_no), int(capacity))

messagebox.showinfo("Info", "Room added successfully!")

refresh\_rooms()

else:

messagebox.showerror("Error", "Invalid input!")

def refresh\_rooms():

for row in room\_table.get\_children():

room\_table.delete(row)

rooms = db\_handler.fetch\_rooms()

for room in rooms:

room\_table.insert("", "end", values=room)

tk.Label(app, text="Room No:").grid(row=0, column=0, padx=10, pady=5)

tk.Label(app, text="Capacity:").grid(row=1, column=0, padx=10, pady=5)

room\_no\_entry = tk.Entry(app)

capacity\_entry = tk.Entry(app)

room\_no\_entry.grid(row=0, column=1, padx=10, pady=5)

capacity\_entry.grid(row=1, column=1, padx=10, pady=5)

tk.Button(app, text="Add Room", command=add\_room\_ui).grid(row=2, column=1, pady=5)

columns = ("ID", "Room No", "Capacity", "Occupied")

room\_table = ttk.Treeview(app, columns=columns, show="headings")

for col in columns:

room\_table.heading(col, text=col)

room\_table.column(col, width=100)

room\_table.grid(row=3, column=0, columnspan=3, padx=10, pady=10)

# --- Payment Management ---

def add\_payment\_ui():

student\_id = student\_id\_entry.get()

amount = amount\_entry.get()

date = date\_entry.get()

if student\_id.isdigit() and amount.replace('.', '', 1).isdigit():

db\_handler.add\_payment(int(student\_id), float(amount), date)

messagebox.showinfo("Info", "Payment recorded successfully!")

refresh\_payments()

else:

messagebox.showerror("Error", "Invalid input!")

def refresh\_payments():

for row in payment\_table.get\_children():

payment\_table.delete(row)

payments = db\_handler.fetch\_payments()

for payment in payments:

payment\_table.insert("", "end", values=payment)

tk.Label(app, text="Student ID:").grid(row=4, column=0, padx=10, pady=5)

tk.Label(app, text="Amount:").grid(row=5, column=0, padx=10, pady=5)

tk.Label(app, text="Date (YYYY-MM-DD):").grid(row=6, column=0, padx=10, pady=5)

student\_id\_entry = tk.Entry(app)

amount\_entry = tk.Entry(app)

date\_entry = tk.Entry(app)

student\_id\_entry.grid(row=4, column=1, padx=10, pady=5)

amount\_entry.grid(row=5, column=1, padx=10, pady=5)

date\_entry.grid(row=6, column=1, padx=10, pady=5)

tk.Button(app, text="Add Payment", command=add\_payment\_ui).grid(row=7, column=1, pady=5)

payment\_columns = ("ID", "Student Name", "Amount", "Date")

payment\_table = ttk.Treeview(app, columns=payment\_columns, show="headings")

for col in payment\_columns:

payment\_table.heading(col, text=col)

payment\_table.column(col, width=100)

payment\_table.grid(row=8, column=0, columnspan=3, padx=10, pady=10)

refresh\_rooms()

refresh\_payments()

app.mainloop()