import sqlite3

from tkinter import \*

from tkinter import messagebox

# Database setup

def init\_db():

conn = sqlite3.connect('car\_catalog.db')

c = conn.cursor()

c.execute('''CREATE TABLE IF NOT EXISTS cars (

id INTEGER PRIMARY KEY AUTOINCREMENT,

name TEXT,

model TEXT,

year INTEGER,

price REAL,

fuel\_type TEXT

)''')

conn.commit()

conn.close()

# Add car to catalog

def add\_car():

if name\_var.get() == "" or model\_var.get() == "":

messagebox.showerror("Error", "Name and Model are required")

return

conn = sqlite3.connect('car\_catalog.db')

c = conn.cursor()

c.execute("INSERT INTO cars (name, model, year, price, fuel\_type) VALUES (?, ?, ?, ?, ?)",

(name\_var.get(), model\_var.get(), year\_var.get(), price\_var.get(), fuel\_var.get()))

conn.commit()

conn.close()

messagebox.showinfo("Success", "Car added successfully")

clear\_fields()

view\_cars()

# View all cars

def view\_cars():

conn = sqlite3.connect('car\_catalog.db')

c = conn.cursor()

c.execute("SELECT \* FROM cars")

rows = c.fetchall()

listbox.delete(0, END)

for row in rows:

listbox.insert(END, row)

conn.close()

# Delete selected car

def delete\_car():

selected = listbox.curselection()

if not selected:

messagebox.showwarning("Warning", "Select a car to delete")

return

car\_id = listbox.get(selected[0])[0]

conn = sqlite3.connect('car\_catalog.db')

c = conn.cursor()

c.execute("DELETE FROM cars WHERE id=?", (car\_id,))

conn.commit()

conn.close()

messagebox.showinfo("Deleted", "Car deleted successfully")

view\_cars()

# Clear input fields

def clear\_fields():

name\_var.set("")

model\_var.set("")

year\_var.set("")

price\_var.set("")

fuel\_var.set("")

# GUI Setup

root = Tk()

root.title("Automated Car Catalog System")

root.geometry("700x500")

name\_var = StringVar()

model\_var = StringVar()

year\_var = StringVar()

price\_var = StringVar()

fuel\_var = StringVar()

Label(root, text="Car Name").grid(row=0, column=0)

Entry(root, textvariable=name\_var).grid(row=0, column=1)

Label(root, text="Model").grid(row=1, column=0)

Entry(root, textvariable=model\_var).grid(row=1, column=1)

Label(root, text="Year").grid(row=2, column=0)

Entry(root, textvariable=year\_var).grid(row=2, column=1)

Label(root, text="Price").grid(row=3, column=0)

Entry(root, textvariable=price\_var).grid(row=3, column=1)

Label(root, text="Fuel Type").grid(row=4, column=0)

Entry(root, textvariable=fuel\_var).grid(row=4, column=1)

Button(root, text="Add Car", command=add\_car).grid(row=5, column=0, pady=10)

Button(root, text="Delete Selected", command=delete\_car).grid(row=5, column=1, pady=10)

Button(root, text="View All", command=view\_cars).grid(row=5, column=2, pady=10)

listbox = Listbox(root, width=100)

listbox.grid(row=6, column=0, columnspan=3, padx=10, pady=10)

init\_db()

view\_cars()

root.mainloop()