BLOCKCHAIN ENGINEERING

ASSIGNMENT - 006

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Batch: 05

Problem Statement -

Develop a basic Personal Portfolio Smart Contract that stores and retrieves portfolio details (name, role, and description).

Code -

assignment6.py > ...

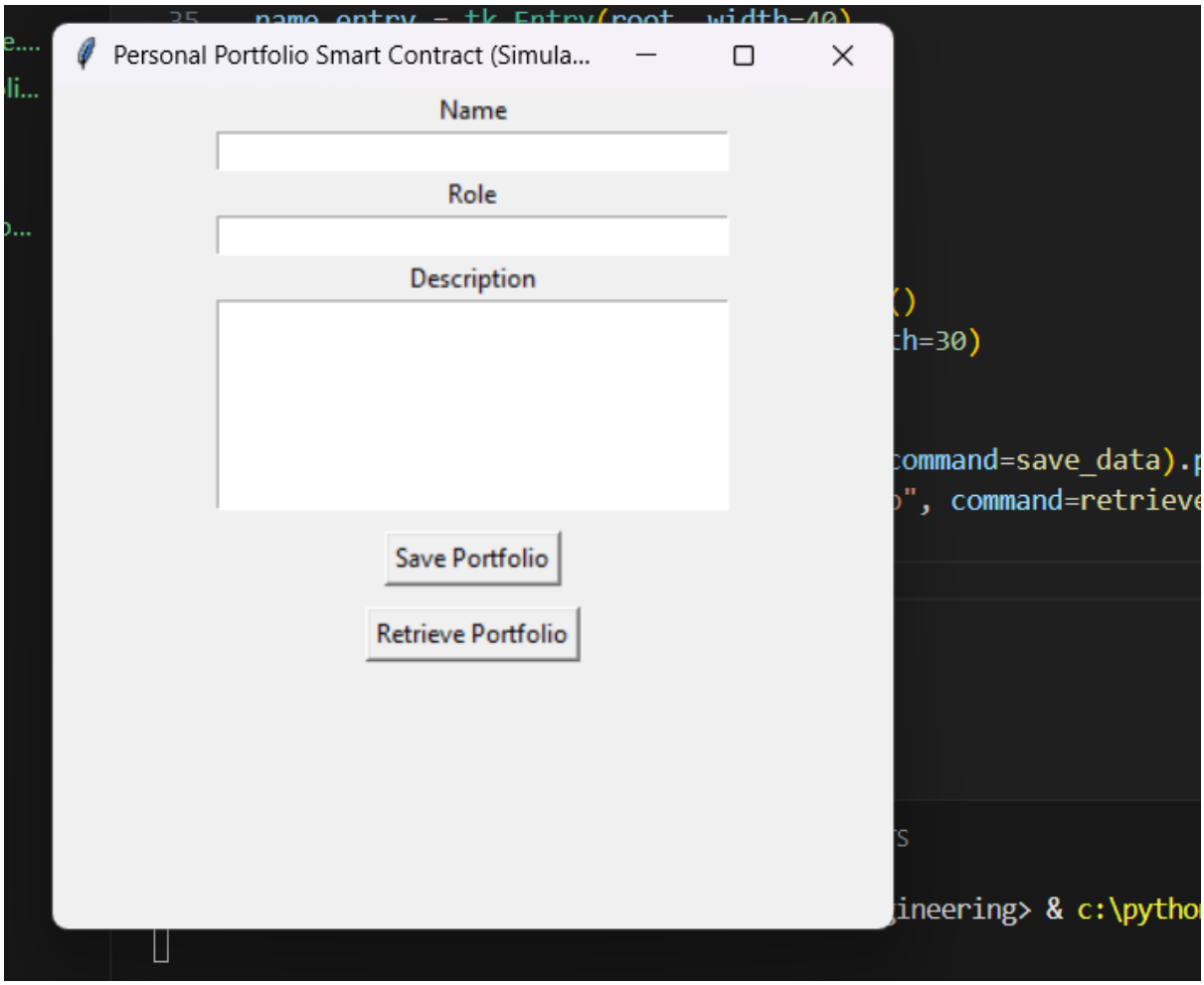
```python
import tkinter as tk
from tkinter import messagebox

# Storage (simulating smart contract storage)
portfolio_data = {}

# Function to save data
def save_data():
    name = name_entry.get()
    role = role_entry.get()
    desc = desc_text.get("1.0", tk.END).strip()

    if name and role and desc:
        portfolio_data["name"] = name
        portfolio_data["role"] = role
        portfolio_data["description"] = desc
        messagebox.showinfo("Success", "Portfolio Saved Successfully")
    else:
        messagebox.showwarning("Error", "All fields required")
```

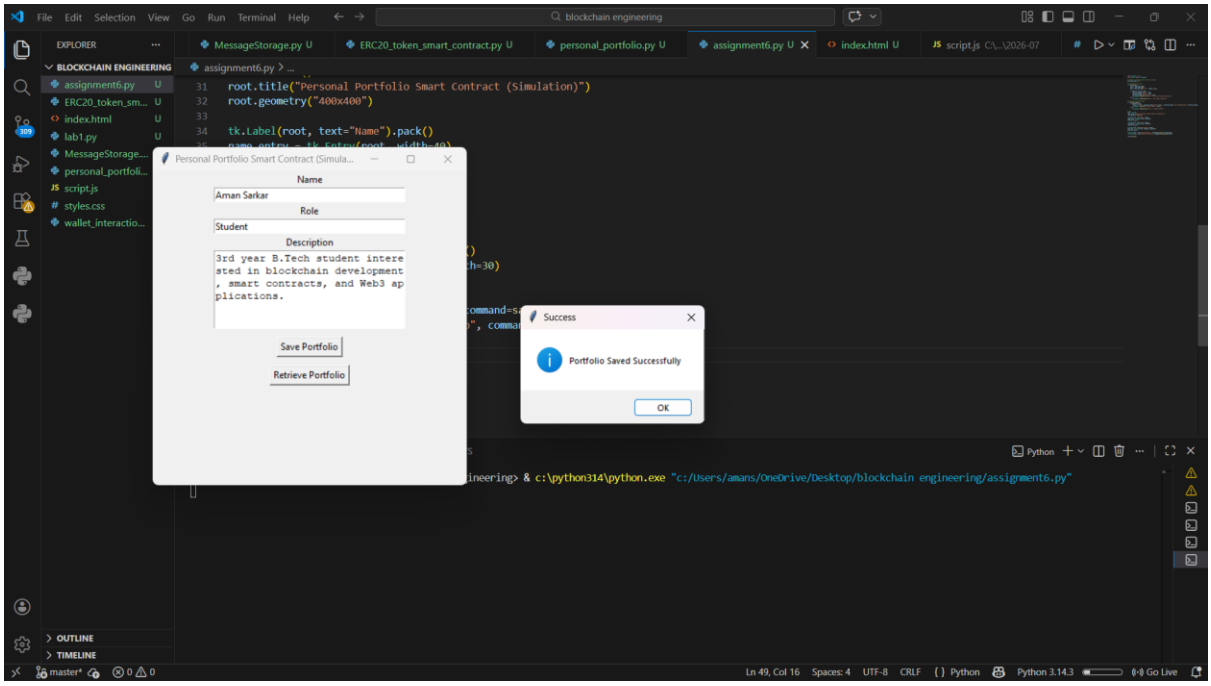
assignment6.py > ...

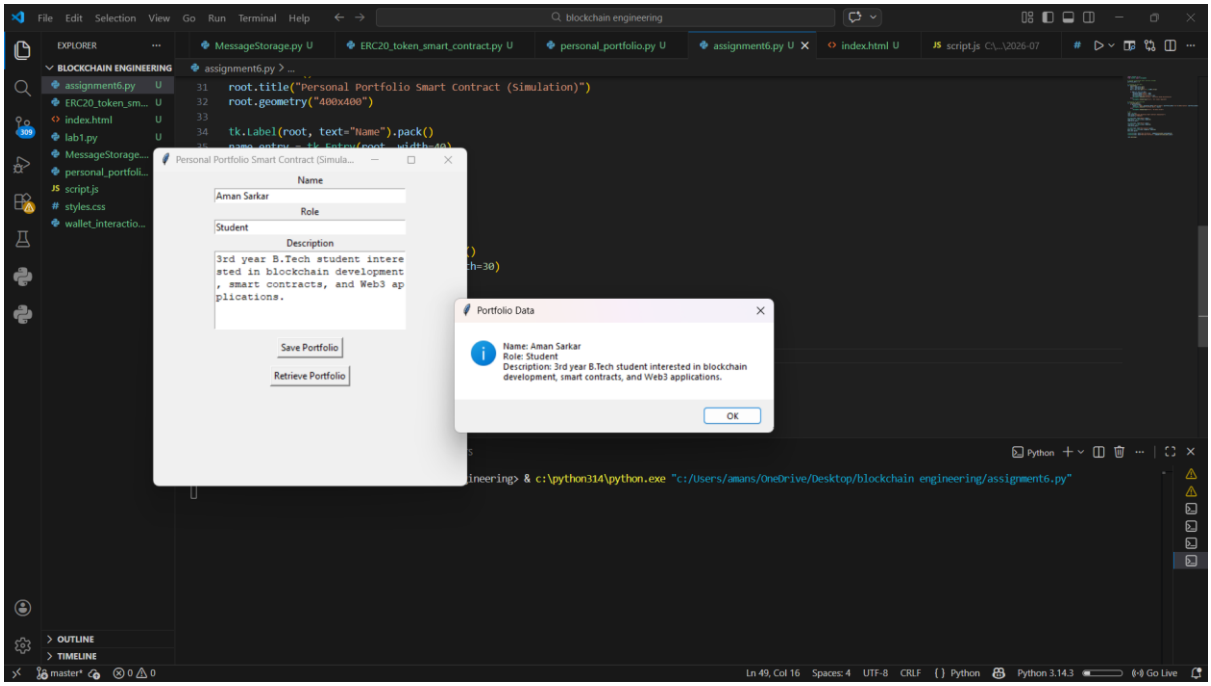
```python
# Function to retrieve data
def retrieve_data():
    if portfolio_data:
        result = f"Name: {portfolio_data['name']}\nRole: {portfolio_data['role']}\nDescription: {portfolio_data['description']}"
        messagebox.showinfo("Portfolio Data", result)
    else:
        messagebox.showwarning("Error", "No data stored")

# GUI
root = tk.Tk()
root.title("Personal Portfolio Smart Contract (Simulation)")
root.geometry("400x400")

tk.Label(root, text="Name").pack()
name_entry = tk.Entry(root, width=40)
name_entry.pack()

tk.Label(root, text="Role").pack()
role_entry = tk.Entry(root, width=40)
role_entry.pack()

tk.Label(root, text="Description").pack()
desc_text = tk.Text(root, height=6, width=30)
desc_text.pack()
```

```
45
46  tk.Button(root, text="Save Portfolio", command=save_data).pack(pady=10)
47  tk.Button(root, text="Retrieve Portfolio", command=retrieve_data).pack()
48
49  root.mainloop()
```

Output -




Personal Portfolio Smart Contract (Simula...
Name
Aman Sarkar
Role
Student
Description
3rd year B.Tech student interested in blockchain development, smart contracts, and Web3 applications.
Save Portfolio
Retrieve Portfolio
Success
Portfolio Saved Successfully
OK
root.title("Personal Portfolio Smart Contract (Simulation)")
root.geometry("400x400")
tk.Label(root, text="Name").pack()
c:\python314\python.exe "c:/Users/amans/OneDrive/Desktop/blockchain engineering/assignment6.py"


Personal Portfolio Smart Contract (Simula...
Name
Aman Sarkar
Role
Student
Description
3rd year B.Tech student interested in blockchain development, smart contracts, and Web3 applications.
Save Portfolio
Retrieve Portfolio
Portfolio Data
Name: Aman Sarkar
Role: Student
Description: 3rd year B.Tech student interested in blockchain development, smart contracts, and Web3 applications.
OK
root.title("Personal Portfolio Smart Contract (Simulation)")
root.geometry("400x400")
tk.Label(root, text="Name").pack()
c:\python314\python.exe "c:/Users/amans/OneDrive/Desktop/blockchain engineering/assignment6.py"