Report On Phase-1 Project Work

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ACKNOWLEDGEMENT

I'm extremely grateful to get trained under "SimplyLearn" as I have gained immense knowledge on the Project-1 Training accessed through Instructor Kiran on C-sharp, Agile Scrum Concepts, Data Structures and OOPS Concepts.

This project has made me to gain much more knowledge on the C-Sharp Programming as this involves something out of the box to think and implement Logic.

DECLARATION

The Project embodied is hereby solely done by me, This is a genuine work and is no where related to any external works.

Revanth M

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PROBLEM STATEMENT

Given a text file containing the Records of Teachers, Perform the below 5 Operations on the text-file using a Console Window Application (based on C# Concepts)

1. Read the Text File and Display on the Console.
2. Add the Data to the text file by taking the details from the user.
3. Delete The specific Teacher Data by taking ID as the input from the user.
4. Get the particular Teacher Information by Taking ID as the Input parameter.
5. Update the specific teacher ID by taking the input from the user.

PROBLEM LOGIC

I have implemented the working Logic as following.
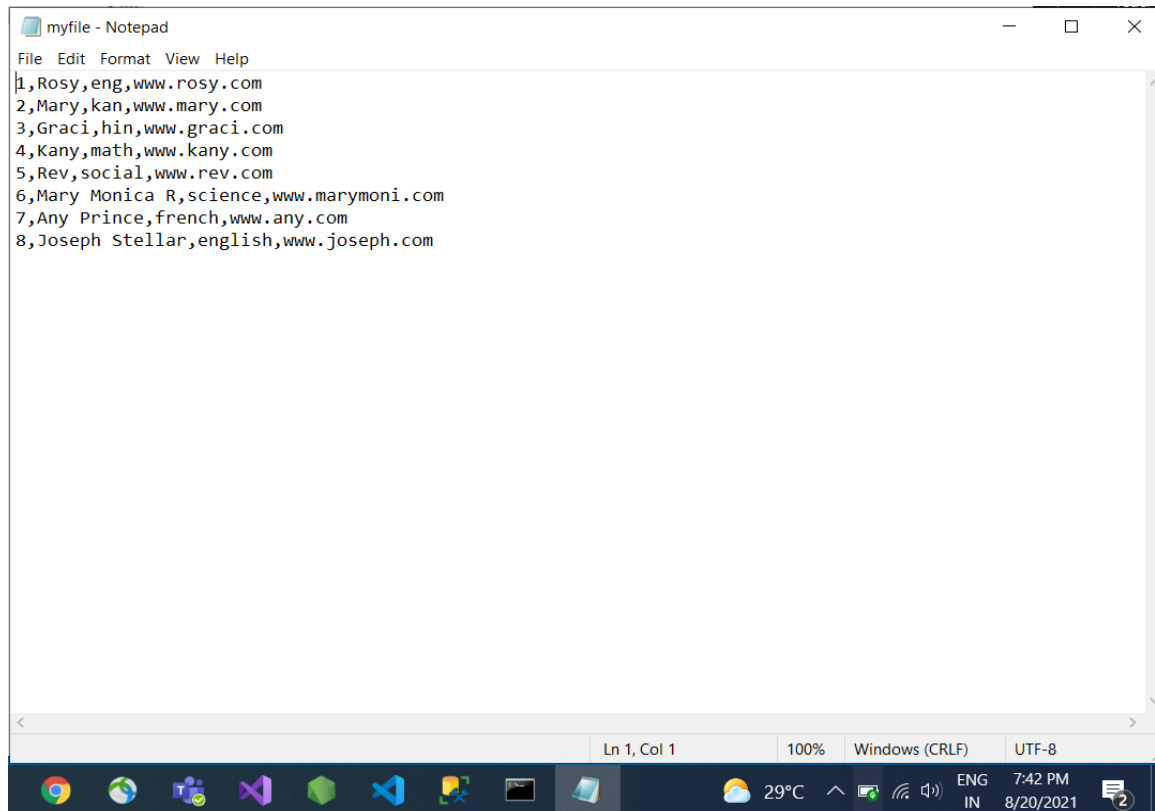
1. Use While Loop to switch between operations and perform specific task based on input.

2. Data on the Text file is as the format (Id,TeacherName,Subject,Address),To implement File operations=> use System.IO to install assembly references.

3. To Read from the file, I have used File.ReadAllLines method that returns string array which contains all lines of the file and create a new list.

    *   Split lines using split method in the newly created lists by iterating through each item using a foreach loop.

    *   Exceptions occur if number of elements in the line moves beyond 4 entries, so implement a try catch block and then inside the loop console log details.

4. To Add the Details using command prompt, Get the details from the user and use File.AppendAllLines method to insert the data at the EOF.

5. To Delete the particular data based on the entry,I have created a new List, wherein at the beginning, we ReadAllLines from the text file.

    *   Iterate using the foreach loop, and using if block when the first entry matches the given id=do nothing and in remaining cases just write the contents into a newly created list and use File.WriteAllLines method to perform on the text file.

6. To Get the teacher data by ID, do same operation as before in point 5, except that when the first entry matches the given id, just console log the data in that line.

7. To Update the Data, create a new list and call ReadAllLines method and store it, if the entry matches the 1st entry of data, Then ask for remaining details and overwrite the existing details and then use File.WriteAllLines,If not matches, Then put the data into the newly created list and use the same method.

RESULTS

The Corresponding Code is available Here please check.

The following are the snapshots of my work along with explanation.

1) Initial Record of the Teacher Data.
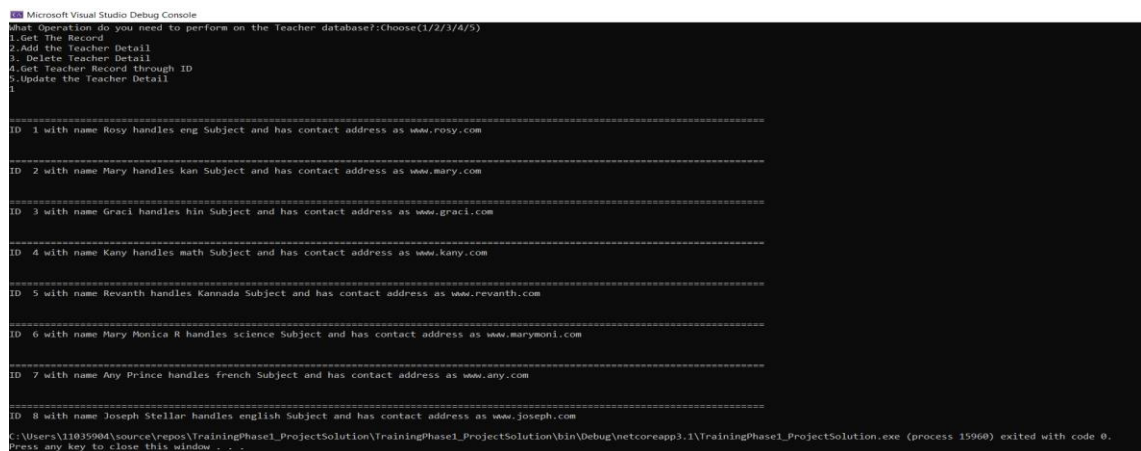
Figure 1: Initial File Contents.
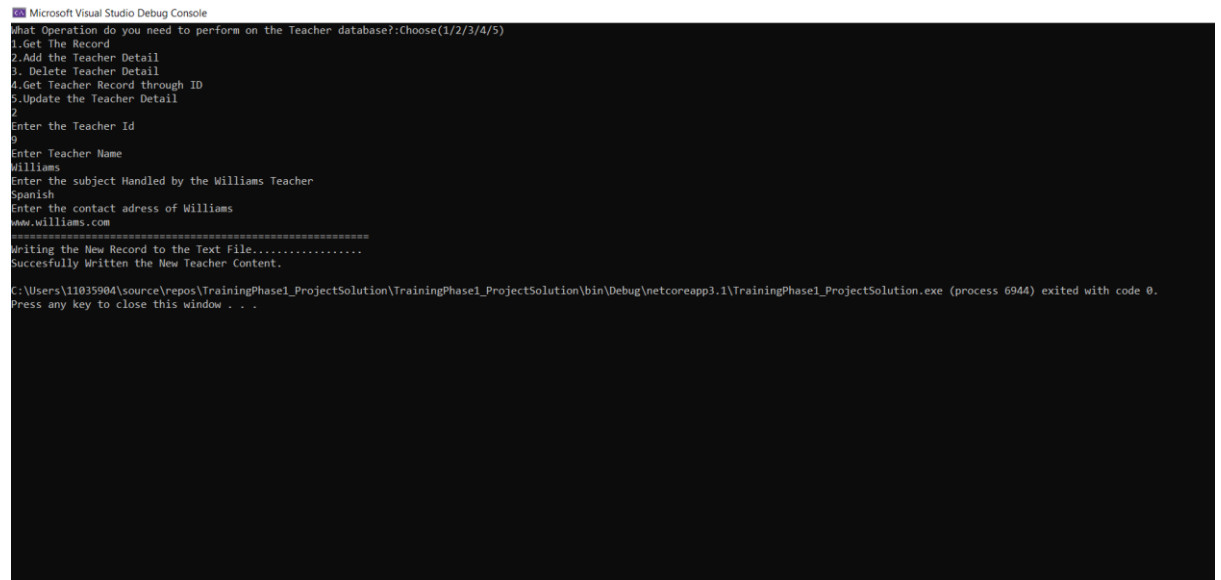
2) Reading from the file and displaying on the Console Window.

Figure2: As reference to Figure1. Console Window output is shown here.

2.Adding Teacher Detail

Figure 3: User Added a new entry through command prompt.
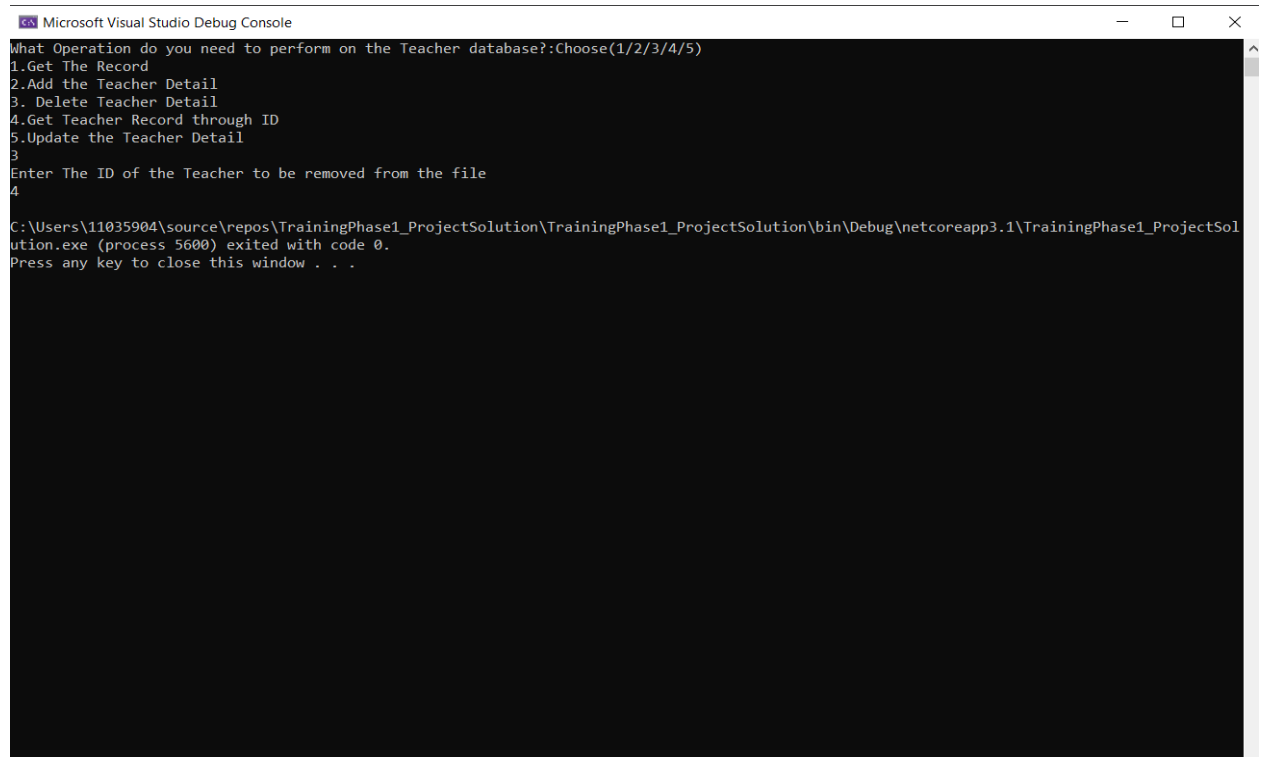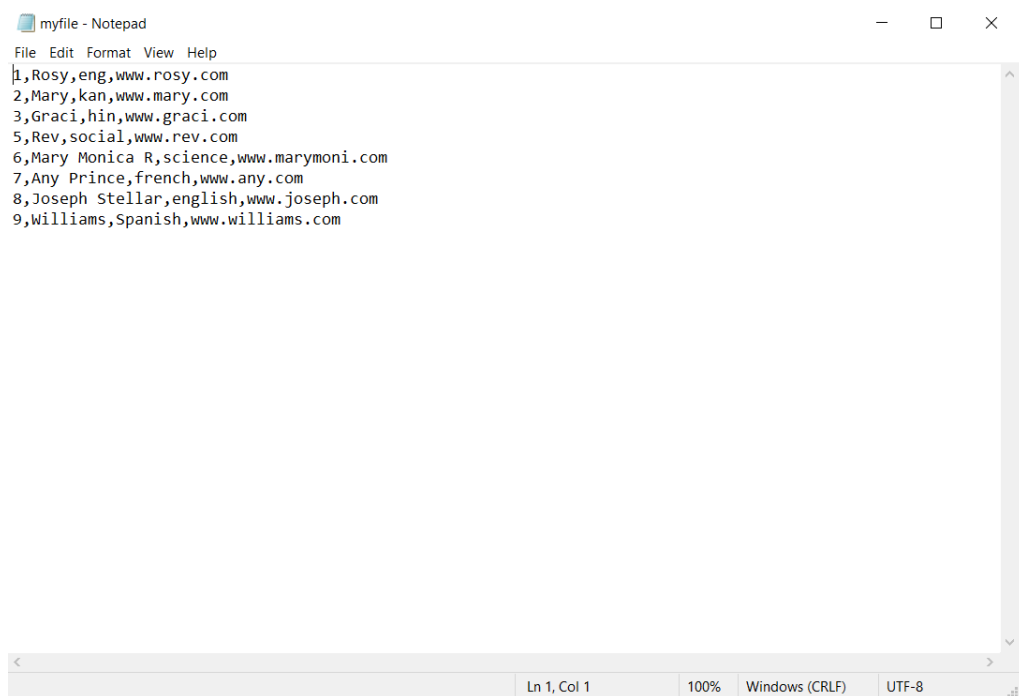
Figure4: After the execution of adding detail, File shows up like this

3.Deleting the teacher data based on the Id is shown here
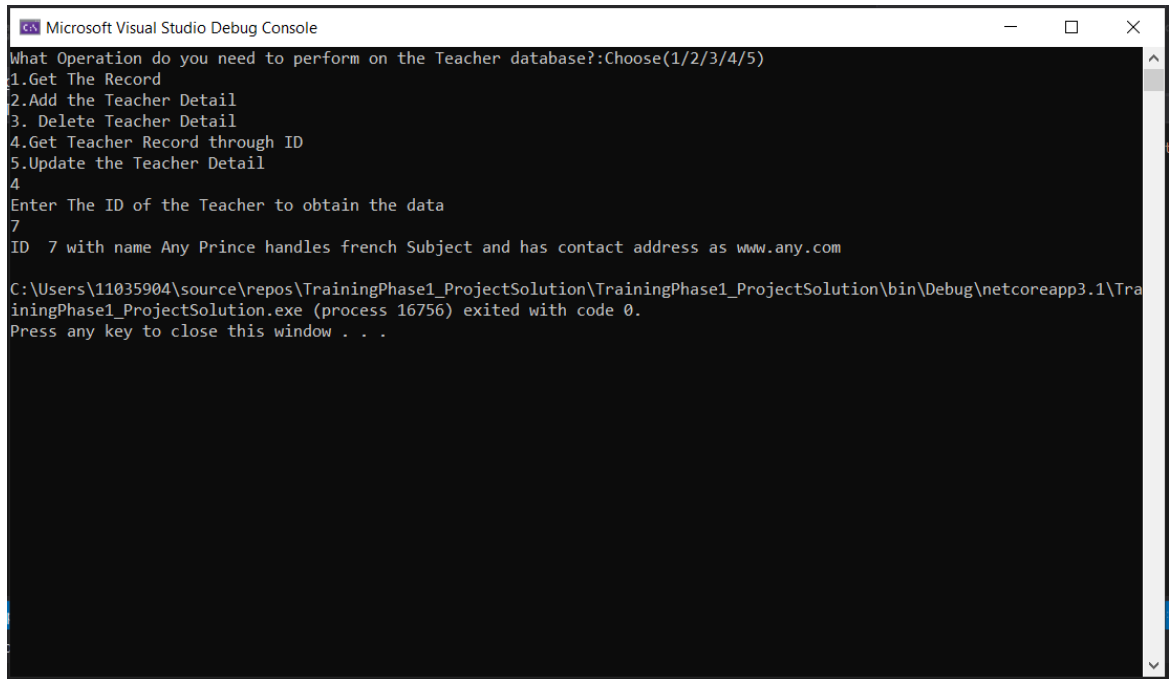
Figure5: Command Prompt operations on Deletion

Figure6: Contents after Deletion of the ID=4 entered by the User and text file
looks like this with reference to figure 4
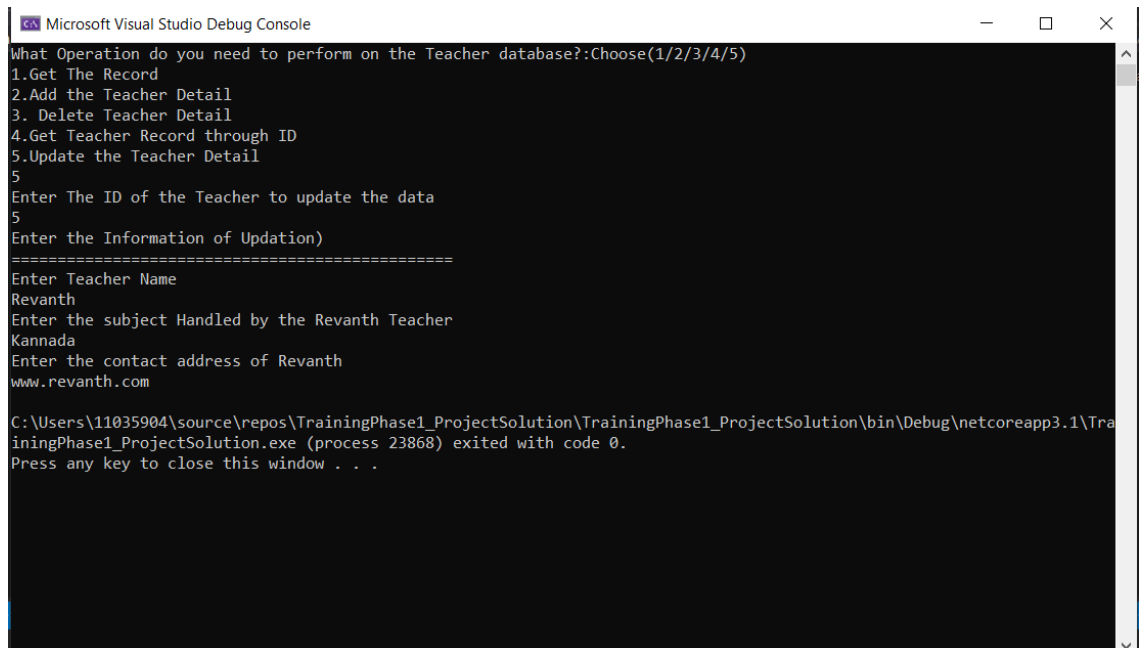
4. Getting Teacher Data through Id

Figure 7: With reference to figure 6 now, the data corresponding to ID=7 entered by the user is shown like this.
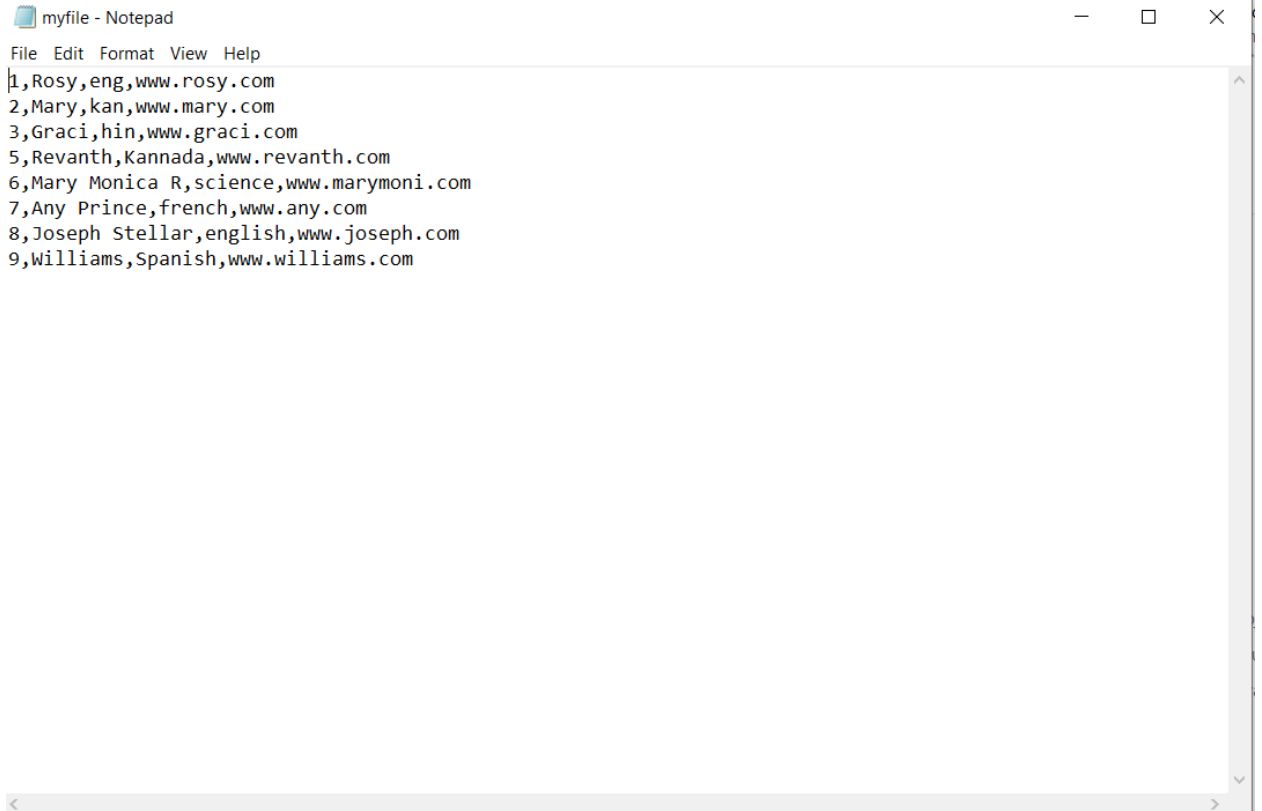
5.Updating the Teacher data

Figure8: User entered to edit Id=5, and the command prompt is shown like this.

Figure 9: Compare figure 6, We observe the updating of the teacher data.

END OF PROJECT

THANKING YOU

Revanth M.