

**Dharmsinh Desai University, Nadiad**  
**Department of Information Technology**  
**Knowledge Systems**  
**B.Tech. IT, SEM: VII**

## **1. Project Details:**

**Project Title:** Web-series Recommendation System

**Project Members:**

- 1) IT088-Vraj Panchal
- 2) IT089-Aanandi Pankhania
- 3) IT090-Abhay Parsaniya

**Project Description:**

In this project, we will recommend the web-series according to the user's choices. We'll also keep age restriction option for a particular series for not showing some of the restricted underage series. Choices such as name, genre, ratings, language, and if it's age restricted or not can be collected from user. We can collect web-series data from user and store it in text file.

## **2. Prolog Features used:**

- Variables- for coding.
- Rules- for coding.
- Input predicates-  
    readint- for collecting user's choice from the menu provided in which user needs to write the particular integer from menu.  
    readln- we used readln for reading the whole lines to read(provided by user such as series name).
- Output predicates-  
    We used output in order to show web series information and write on the screen.
- Arithmetic operators- used when compared ratings (taken min ratings)
- Fail predicates-  
    If any condition fails prolog backtracks to the previous condition and will try to prove it again with another variable then it moves forward again to see if the fail condition will succeed with the newly one prolog moves forward and backward direction through the condition and will try every

attempt to get the goal to succeed as many as possible. Here, we used this in our conditions such as to provide list we will need to backtrack and check the list again

- Cut predicates-  
Cut will remove all alternatives and then forbid the values otherwise it could be written by method of binding. Here we used it in rule number 6 to forbid the value of genre.
- Dynamic Database-  
We used dynamic database to insert web series details as well as for deletion of required information. Apart from this, we used this for data storage in file system.

### 3. Prolog Code:

```
domains
    name,genre,language,age = symbol
    rating = integer
database
    webseries(name,genre,language,rating,age)

predicates
    start
    rule(Integer)
    choice(Integer)
    continue(String)

clauses

start:-
    clearwindow(),
    write("===== Project: Web-Series Recommendation ====="),nl,
    write("1. Enter New Web-Series."),nl,
        write("2. Display All Web-Serie Details."),nl,
        write("3. Display specific Web-Series Details."),nl,
    write("4. List of Web-Series having Age Restriction."),nl,
    write("5. List of Web-Series having rating greater than specified rating."),nl,
        write("6. Display list of Webseries excluding specific genre"),nl,
        write("7. Delete the Web-Series Data"),nl,
        write("8. Exit from the program."),nl,
    write("Enter the Choice: "),readint(X),
    rule(X),nl,
        write("Do you want to continue? "),
        readln(C),
        continue(C).

rule(1):-
```

```

nl,write("Enter Web-Series:-"),
    readln(Name),
write("Enter Genre:-"),
    readln(Genre),
write("Enter Language:-"),
    readln(Language),
write("Enter Rating:-"),
    readint(Rating),
write("Enter Age Restriction:-"),
    readln(Age),
asserta(webseries(Name,Genre,Language,Rating,Age)),nl,
save("ws2.txt"),
nl,write("Saved Successfully....!!!!"),nl.

```

rule(2):-

```

nl,write("Display All Web-Series Details:- "),
webseries(N,G,L,R,A),nl,
write(N,"-",G,"-",L,"-",R,"-",A),fail,nl.

```

rule(3):-

```

nl,
write("Enter the category:- "),nl,
write("1. Name."),nl,
write("2. Genre."),nl,
write("3. Language."),nl,
write("Enter your choice: "),
readint(Z),nl,
choice(Z).

```

rule(4):-

```

nl,write("Age Restriction Web-series(Yes|No):- "),
readln(A),
webseries(N,G,L,R,A),nl,
write(N,"-",G,"-",L,"-",R,"-",A),nl,fail.

```

rule(5):-

```

nl,write("\nEnter Minimum Rating:- "),
readint(X),
webseries(N,G,L,R,A),
X<R,nl,
write(N,"-",G,"-",L,"-",R,"-",A),nl,fail.

```

rule(6):-

```

write("Enter genre name to be excluded from Webseries list: "),
readln(GX),!,
webseries(N,G,L,R,A),
G<>GX,nl,
write(N,"-",G,"-",L,"-",R,"-",A),nl,fail.

```

rule(7):-

```

    nl,write("Enter Web-Series which you want to delete:-"),
        readln(Name),
    retract(webseries(Name,_,_,_,_)),nl,
    save("ws2.txt"),
    nl,write("Deleted Successfully....!!!!"),nl.

```

rule(8):-

```

    nl,write("Program Terminated Successfully...Thank You...!!!!"),nl,
        continue(n).

```

choice(1):-

```

        write("Enter Web series Name:- "),
        readln(N),
        webseries(N,G,L,R,A),nl,
    write(N,"-",G,"-",L,"-",R,"-",A),nl.

```

choice(2):-

```

        write("Enter Web series Genre:- "),
        readln(G),
        webseries(N,G,L,R,A),nl,
    write(N,"-",G,"-",L,"-",R,"-",A),nl,fail.

```

choice(3):-

```

        write("Enter Web series Language:- "),
        readln(L),
        webseries(N,G,L,R,A),nl,
    write(N,"-",G,"-",L,"-",R,"-",A),nl,fail.

```

continue(y):-

```

    start.

```

continue(n):-

```

    nl,write("Program Terminated Successfully...Thank You...!!!!"),nl.

```

## 4. Output Screenshots:

### 1) User's choice : 1

// entering data into text file

```

===== Project: Web-Series Recommendation =====
1. Enter New Web-Series.
2. Display All Web-Serie Details.
3. Display specific Web-Series Details.
4. List of Web-Series having Age Restriction.
5. List of Web-Series having rating greater than specified rating.
6. Display list of Webseries excluding specific genre
7. Delete the Web-Series Data
8. Exit from the program.
Enter the Choice: 1

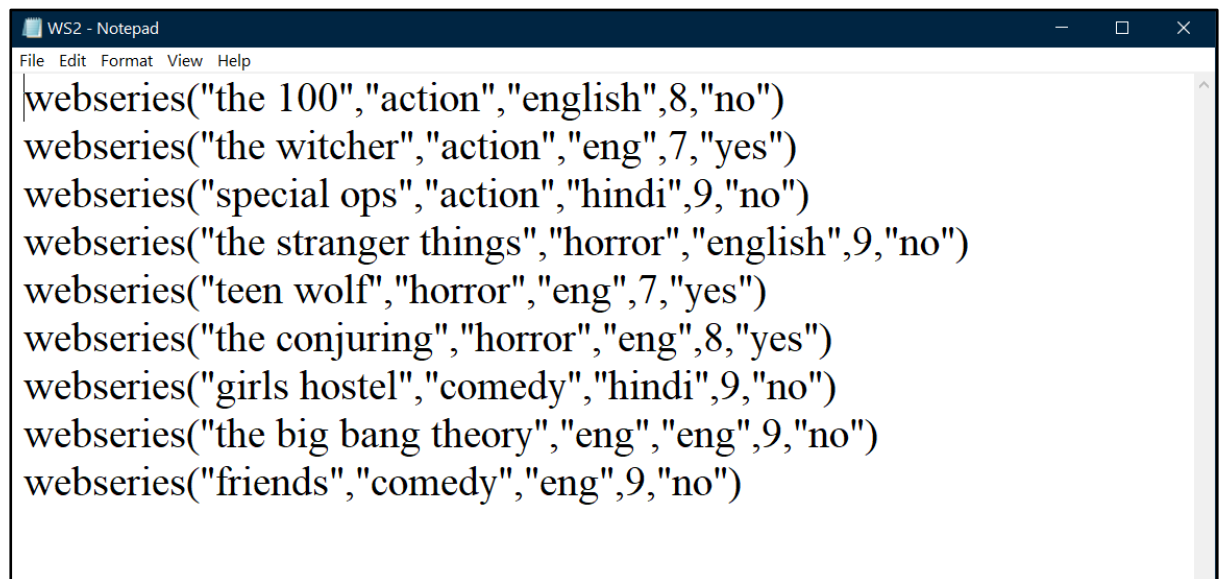
Enter Web-Series:-friends
Enter Genre:-comedy
Enter Language:-eng
Enter Rating:-9
Enter Age Restriction:-no

Saved Successfully....!!!!

Do you want to continue? y

```

//Text file after insertion:

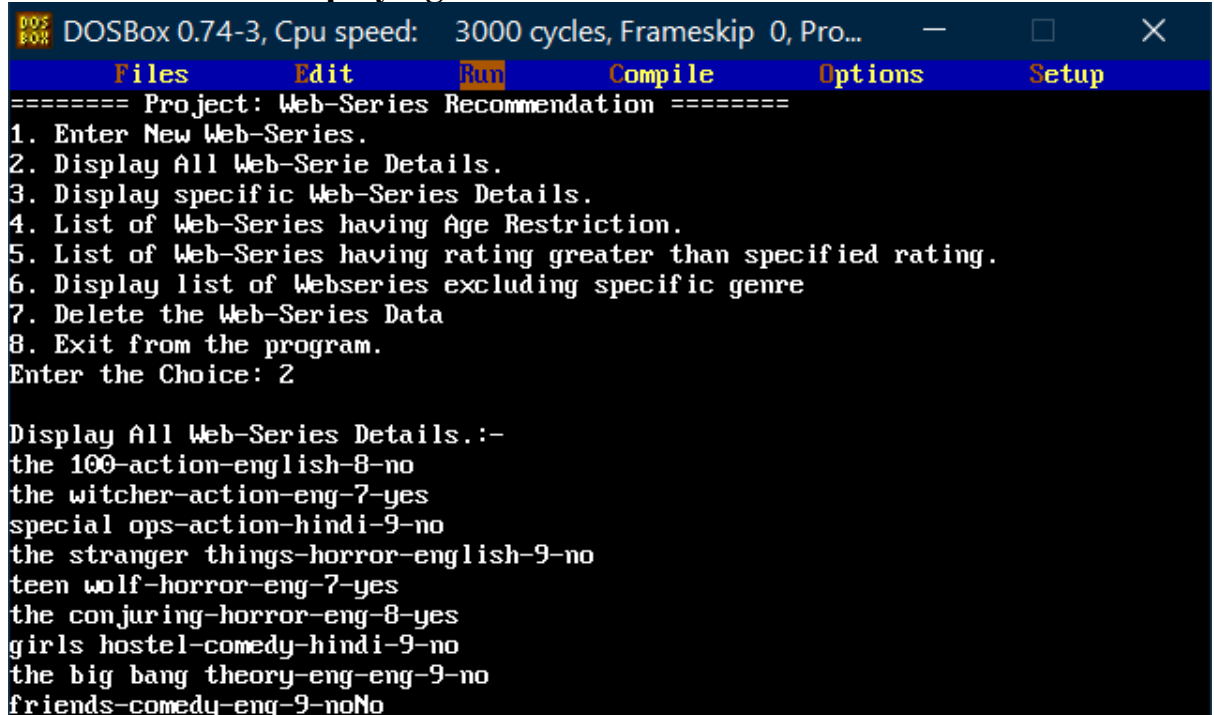


```

WS2 - Notepad
File Edit Format View Help
webseries("the 100","action","english",8,"no")
webseries("the witcher","action","eng",7,"yes")
webseries("special ops","action","hindi",9,"no")
webseries("the stranger things","horror","english",9,"no")
webseries("teen wolf","horror","eng",7,"yes")
webseries("the conjuring","horror","eng",8,"yes")
webseries("girls hostel","comedy","hindi",9,"no")
webseries("the big bang theory","eng","eng",9,"no")
webseries("friends","comedy","eng",9,"no")

```

## 2) User's choice:2 //displaying all web-series



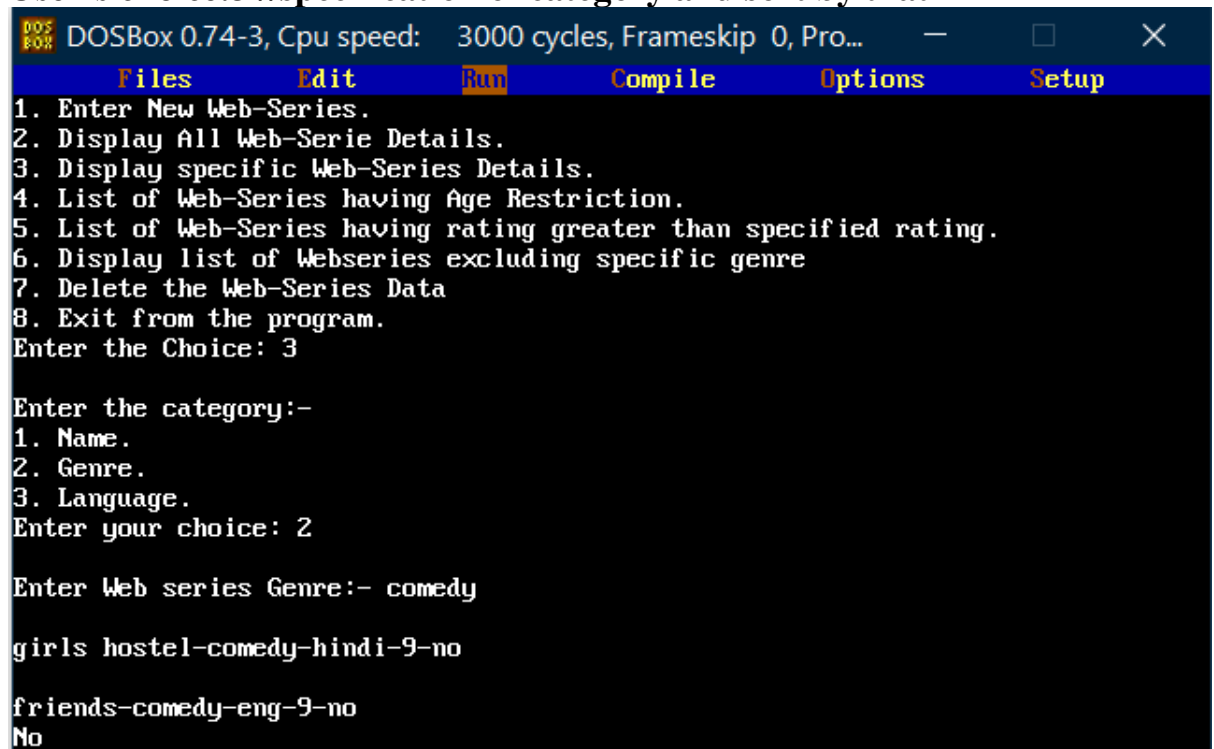
```

DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Pro...
Files Edit Run Compile Options Setup
===== Project: Web-Series Recommendation =====
1. Enter New Web-Series.
2. Display All Web-Series Details.
3. Display specific Web-Series Details.
4. List of Web-Series having Age Restriction.
5. List of Web-Series having rating greater than specified rating.
6. Display list of Webseries excluding specific genre
7. Delete the Web-Series Data
8. Exit from the program.
Enter the Choice: 2

Display All Web-Series Details.:-
the 100-action-english-8-no
the witcher-action-eng-7-yes
special ops-action-hindi-9-no
the stranger things-horror-english-9-no
teen wolf-horror-eng-7-yes
the conjuring-horror-eng-8-yes
girls hostel-comedy-hindi-9-no
the big bang theory-eng-eng-9-no
friends-comedy-eng-9-noNo

```

## 3) User's choice:3 //specification of category and sort by that



```

DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Pro...
Files Edit Run Compile Options Setup
1. Enter New Web-Series.
2. Display All Web-Series Details.
3. Display specific Web-Series Details.
4. List of Web-Series having Age Restriction.
5. List of Web-Series having rating greater than specified rating.
6. Display list of Webseries excluding specific genre
7. Delete the Web-Series Data
8. Exit from the program.
Enter the Choice: 3

Enter the category:-
1. Name.
2. Genre.
3. Language.
Enter your choice: 2

Enter Web series Genre:- comedy

girls hostel-comedy-hindi-9-no

friends-comedy-eng-9-no
No

```

- 4) User's choice:4 // if a particular series is age restricted or not(for 18+ only or not)

```

DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Pro...
Files Edit Run Compile Options Setup
===== Project: Web-Series Recommendation =====
1. Enter New Web-Series.
2. Display All Web-Series Details.
3. Display specific Web-Series Details.
4. List of Web-Series having Age Restriction.
5. List of Web-Series having rating greater than specified rating.
6. Display list of Webseries excluding specific genre
7. Delete the Web-Series Data
8. Exit from the program.
Enter the Choice: 4

Age Restriction Web-series(Yes!No):- yes

the witcher-action-eng-7-yes

teen wolf-horror-eng-7-yes

the conjuring-horror-eng-8-yes
No

```

- 5) User's choice:5 //use of arithmetic op.(>) for rating comparison

```

DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Pro...
Files Edit Run Compile Options Setup
2. Display All Web-Series Details.
3. Display specific Web-Series Details.
4. List of Web-Series having Age Restriction.
5. List of Web-Series having rating greater than specified rating.
6. Display list of Webseries excluding specific genre
7. Delete the Web-Series Data
8. Exit from the program.
Enter the Choice: 5

Enter Minimum Rating:- 8

special ops-action-hindi-9-no

the stranger things-horror-english-9-no

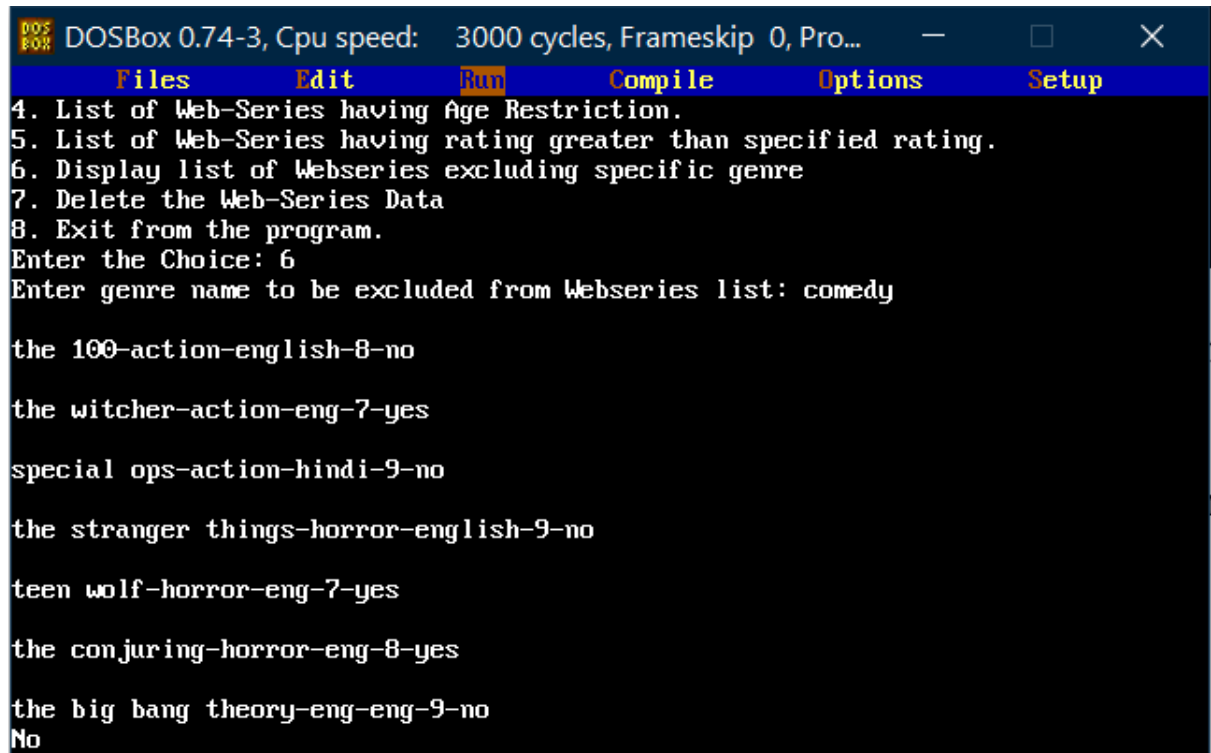
girls hostel-comedy-hindi-9-no

the big bang theory-eng-eng-9-no

friends-comedy-eng-9-no
No

```

- 6) User's choice:6 //Exclude a particular genre and then display the sorted list of series



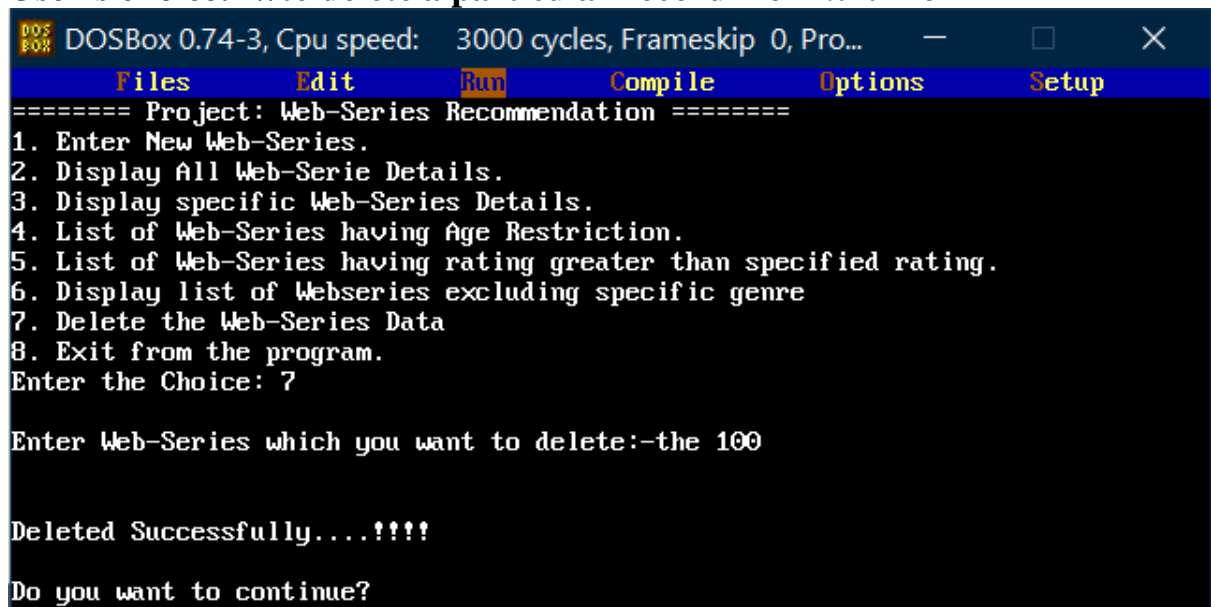
```

DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Pro...
Files Edit Run Compile Options Setup
4. List of Web-Series having Age Restriction.
5. List of Web-Series having rating greater than specified rating.
6. Display list of Webseries excluding specific genre
7. Delete the Web-Series Data
8. Exit from the program.
Enter the Choice: 6
Enter genre name to be excluded from Webseries list: comedy

the 100-action-english-8-no
the witcher-action-eng-7-yes
special ops-action-hindi-9-no
the stranger things-horror-english-9-no
teen wolf-horror-eng-7-yes
the conjuring-horror-eng-8-yes
the big bang theory-eng-eng-9-no
No

```

- 7) User's choice:7 //to delete a particular record from .txt file



```

DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Pro...
Files Edit Run Compile Options Setup
===== Project: Web-Series Recommendation =====
1. Enter New Web-Series.
2. Display All Web-Serie Details.
3. Display specific Web-Series Details.
4. List of Web-Series having Age Restriction.
5. List of Web-Series having rating greater than specified rating.
6. Display list of Webseries excluding specific genre
7. Delete the Web-Series Data
8. Exit from the program.
Enter the Choice: 7

Enter Web-Series which you want to delete:-the 100

Deleted Successfully....!!!!
Do you want to continue?

```



```

DOS BOX DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Pro...
Files Edit Run Compile Options Setup
===== Project: Web-Series Recommendation =====
1. Enter New Web-Series.
2. Display All Web-Serie Details.
3. Display specific Web-Series Details.
4. List of Web-Series having Age Restriction.
5. List of Web-Series having rating greater than specified rating.
6. Display list of Webseries excluding specific genre
7. Delete the Web-Series Data
8. Exit from the program.
Enter the Choice: 7

Enter Web-Series which you want to delete:-the witcher

Deleted Successfully....!!!!

Do you want to continue?

```

```

DOS BOX DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Pro...
Files Edit Run Compile Options Setup
===== Project: Web-Series Recommendation =====
1. Enter New Web-Series.
2. Display All Web-Serie Details.
3. Display specific Web-Series Details.
4. List of Web-Series having Age Restriction.
5. List of Web-Series having rating greater than specified rating.
6. Display list of Webseries excluding specific genre
7. Delete the Web-Series Data
8. Exit from the program.
Enter the Choice: 2

Display All Web-Series Details.:-
special ops-action-hindi-9-no
the stranger things-horror-english-9-no
teen wolf-horror-eng-7-yes
the conjuring-horror-eng-8-yes
girls hostel-comedy-hindi-9-no
the big bang theory-eng-eng-9-no
friends-comedy-eng-9-noNo
Goal: _

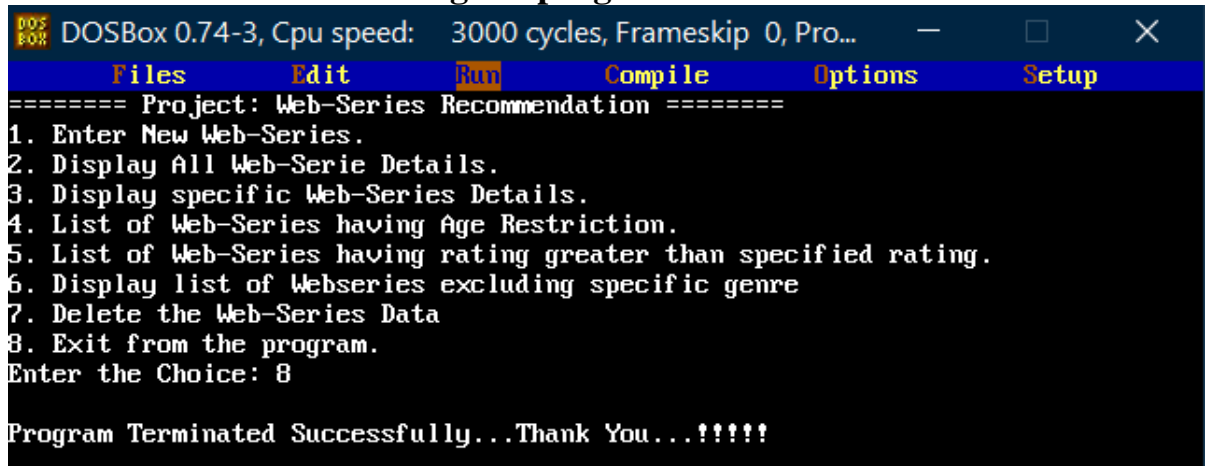
```

```

WS2 - Notepad
File Edit Format View Help
webseries("special ops","action","hindi",9,"no")
webseries("the stranger things","horror","english",9,"no")
webseries("teen wolf","horror","eng",7,"yes")
webseries("the conjuring","horror","eng",8,"yes")
webseries("girls hostel","comedy","hindi",9,"no")
webseries("the big bang theory","eng","eng",9,"no")
webseries("friends","comedy","eng",9,"no")

```

## 8) User's choice:8 //terminating the program



```

DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Pro...
Files Edit Run Compile Options Setup
===== Project: Web-Series Recommendation =====
1. Enter New Web-Series.
2. Display All Web-Serie Details.
3. Display specific Web-Series Details.
4. List of Web-Series having Age Restriction.
5. List of Web-Series having rating greater than specified rating.
6. Display list of Webseries excluding specific genre
7. Delete the Web-Series Data
8. Exit from the program.
Enter the Choice: 8

Program Terminated Successfully...Thank You...!!!!
  
```

## 5. Project Members' roles, contribution and responsibilities:

- 1) IT088-Vraj Panchal  
Modified the old code and implemented new rules with change in basic code functionalities.
- 2) IT089-Aanandi Pankhania  
Did the basic coding, fetched data and implemented functionalities.
- 3) IT090-Abhay Parsaniya  
Came up with the project idea and suggest functionalities + part of implementation.

//Implementation was done by all the members on google meet