University of British Columbia, Vancouver

Department of Computer Science

CPSC 304 Project Cover Page

Milestor	ne #:4	
Date:	_11/26/2021	_

Group Number: ____72____

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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your e-mail address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia

GitHub link:

https://github.students.cs.ubc.ca/CPSC304-2021W-T1/project_r3h3b_v5j3b_w6t6g.git

1. Short description

Our team made a simple PHP web program to manage information about TV programs. We especially focus on the relationship between episodes and programs. We used SQL to query the data from the dataset, and Oracle DBMS (offered by the school server) and PHP as a tool stack.

- 2. Nothing changed from the schema
- 3. All SQL Lists
 - INSERTION: With a given program title(t) and dayPlayed(d), users can create a new program in Program2 with default 0 episodes.

INSERT INTO Program2 VALUES(t, d, 0);

• INSERTION: With program title(pt) and episode title(et) and released date(r) and streaming time(s), user can create an episode in Contain Episode

INSERT INTO Contain Episode VALUES(pt, et, r, s);

• DELETION: With given program title(pt), user can delete a program from Program2

DELETE FROM Program2 WHERE Title = pt;

• DELETION: With given program title(pt) and Episode title(et), user can delete an episode from Contain Episode:

DELETE FROM Contain Episode WHERE Title = et AND ProgramTitle = pt;

• UPDATE: With program title(pt) and number of episode(e) and dayPlayed(d), user can update the number of episodes and dayPlayed in Program2.

UPDATE Program2

SET Episodes = e, dayPlayed = d

WHERE Title = pt;

• UPDATE: With program title(pt) and Episode title(et), user can update ReleasedDate and StreamingTime in Contain Episode

UPDATE Contain Episode

SET ReleasedDate = rd, StreamingTime = st

WHERE Title= et AND ProgramTitle = pt;

• SELECTION, PROJECTION, JOIN: With given program Title(pt), user can know the estimated budget

SELECT Program1.estimateBudget

FROM Program1, Program2

WHERE Program2. Title = pt AND Program1. Episodes = Program2. Episodes

• SELECTION, PROJECTION, JOIN: With given program title(pt) and episode title(et), user can know the dayPlayed and streaming time

SELECT CE.StreamingTime, P.dayPlayed

FROM Program2 P, Contain Episode CE

WHERE P.Title = pt AND CE.Title = et AND CE.ProgramTitle = pt;

• SELECTION, PROJECTION: Users can know the program title in which programs have MAX Episodes from Program2.

SELECT Title

FROM Program2

WHERE Episodes = (SELECT MAX(Episodes) FROM Program2);

• AGGREGATION WITH GROUP BY: User can know number of programs in each dayPlayed from Program2

SELECT dayPlayed, COUNT(*)

FROM Program2

GROUP BY dayPlayed;

• SELECTION, PROJECTION: User can know which program title and episodes number with more than 5 episodes from Program2

SELECT Title, Episodes

FROM Program2

WHERE Episodes > 5

• AGGREGATION WITH HAVING: User can know which dayPlayed with Average episodes of programs is more than 5 from Program2

SELECT dayPlayed

FROM Program2

GROUP BY dayPlayed

Having AVG(Episodes) > 5

• NESTED AGGREGATION WITH GROUP BY: User can know program title which have dayItPlayed with having episodes with more than 6

SELECT P.title

FROM Program2 P

WHERE P.dayPlayed IN (SELECT dayPlayed FROM Program2 GROUP BY dayPlayed HAVING MAX(Episodes) > 6)

• DIVISION: User can know the episode title in which all program have

SELECT DISTINCT CE. Title FROM Contain_Episode CE

WHERE NOT EXISTS (

SELECT p.Title FROM Program2 p

MINUS

SELECT CE2.ProgramTitle FROM Contain_Episode CE2 WHERE CE2.Title = CE.Title

)

• SELECTION, PROJECTION: User can know the program and episode title which have the longest streaming time

SELECT C.ProgramTitle, C.Title

FROM Contain_Episode C

WHERE C.StreamingTime = (SELECT MAX(StreamingTime) FROM Contain_Episode)

4. Screenshots

1) Insert New Program with 0 Episodes:

Before:

		Titl	e Epis	odes dayPlayed
		Α	7	Thursday
		В	3	Friday
Insert New program in to Progra	m Table	C	2	Monday
Title: New		D	5	Friday
Day: Sunday		E	7	Sunday
Day. Sunday		F	2	Sunday
Insert		G	3	Friday

After:

	Title Episodes dayPlayed		
	Α	7	Thursday
Insert New program in to Program Table	В	3	Friday
insert ivew program in to riogram Table	C	2	Monday
Title:	D	5	Friday
	E	7	Sunday
Day:	F	2	Sunday
	G	3	Friday
Insert	New	0	Sunday

2) Delete Program with Program Title:

Before:

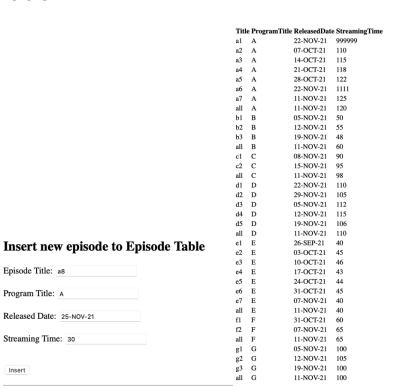
	Title Episodes dayPlayed		
	Α	7	Thursday
	В	3	Friday
Delete Program from Program Table	C	2	Monday
	D	5	Friday
Title: New	E	7	Sunday
	F	2	Sunday
	G	3	Friday
Delete	New	0	Sunday

After:

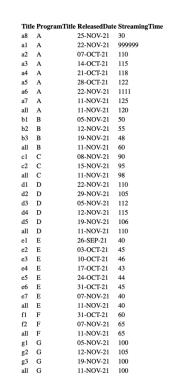
Title Episodes dayPlayed Thursday 7 **Delete Program from Program Table** Friday 3 2 Monday 5 Title: D Friday Ε 7 Sunday F 2 Sunday Delete G Friday

3) Insert New Episode with Episode Title, Program Title, Released Date, and Streaming Time:

Before:



After:



4) Delete Episode with Episode Title and Program Title:

Before

Episode Title:

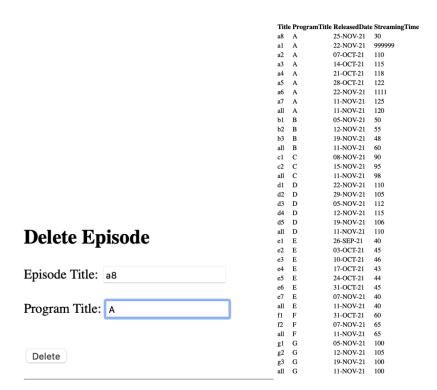
Program Title:

Released Date:

Streaming Time:

Insert

Insert new episode to Episode Table



After:

	Title	e ProgramTitl	e ReleasedDat	e StreamingTime
	a1	A	22-NOV-21	999999
	a2	A	07-OCT-21	110
	a3	A	14-OCT-21	115
	a4	A	21-OCT-21	118
	a5	A	28-OCT-21	122
	a6	A	22-NOV-21	1111
	a7	A	11-NOV-21	125
	all	A	11-NOV-21	120
	b1	В	05-NOV-21	50
	b2	В	12-NOV-21	55
	b3	В	19-NOV-21	48
	all	В	11-NOV-21	60
	c1	C	08-NOV-21	90
	c2	C	15-NOV-21	95
	all	C	11-NOV-21	98
	d1	D	22-NOV-21	110
	d2	D	29-NOV-21	105
	d3	D	05-NOV-21	112
	d4	D	12-NOV-21	115
	d5	D	19-NOV-21	106
D.1.4. E. ! 1.	all	D	11-NOV-21	110
Delete Episode	e1	E	26-SEP-21	40
	e2	E	03-OCT-21	45
	e3	E	10-OCT-21	46
T. 1. 1. 17:41	e4	E	17-OCT-21	43
Episode Title:	e5	E	24-OCT-21	44
	e6	E	31-OCT-21	45
	e7	E	07-NOV-21	40
Program Title:	all	E	11-NOV-21	40
Trogram Tide.	f1	F	31-OCT-21	60
	f2	F	07-NOV-21	65
	all	F	11-NOV-21	65
	g1	G	05-NOV-21	100
Delete	g2	G	12-NOV-21	105
25,515	g3	G	19-NOV-21	100
	all	G	11-NOV-21	100

5) Update Episodes and Day Played with Program Title

Before:

Result

Title

Α Ε

Retrieved data from Program2 table:

Undata Enjander and Day it played	111	ie Epis	odes dayPiayed
Update Episodes and Day it played	Ne	w 0	Thursday
pisodes = 1	Α	7	Thursday
pisoues – 1	В	3	Friday
Pay Played = Sunday	C	2	Monday
	D	5	Friday
Program Title = New	E	7	Sunday
	F	2	Sunday
Update	G	3	Friday
ter:			
Jpdate Episodes and Day it played		_	des dayPlayed
	Nev A	7	Sunday Thursday
pisodes =	В	3	Friday
ov Dlavad –	C	2	Monday
Day Played =	D	5	Friday
rogram Title =	E	7	Sunday
	F	2	Sunday
Update	G	3	Friday
) Display Program title which program h User Interface	ave I	Maxir	num Episodes
Display Program title which pro	ogra	am h	nave Maxir
제출			

Title Episodes dayPlayed

7) Display Program Title and Episodes # with more than 5 episodes

User Interface

Display Program Title and Episodes # with more than 5 episodes

제출

Result

Retrieved data from Program2 table,

Program Title Episodes

A 7
E 7

8) Update Release date and Streaming Time

Title	Program	Title ReleasedDat	e StreamingTime)
a1	Α	30-SEP-21	120	
a2	Α	07-OCT-21	110	
аЗ	Α	14-OCT-21	115	
a4	А	21-OCT-21	118	
а5	Α	28-OCT-21	122	

Update Release date and Streaming Time
Program Title: A
Episode Title: a3
Released Date: 10-MAY-21
Streaming Time: 93
Update it!!
2. After modification
Title ProgramTitle ReleasedDate StreamingTime
a1 A 30-SEP-21 120
a2 A 07-OCT-21 110
a3 A 10-MAY-21 93
a4 A 21-OCT-21 118
a5 A 28-OCT-21 122

9) Display Airdate and Running Time

User Interface	
Display Airdate and Running Time	
Program Title: A	
Episode Title: a3	
Print	
Result	

Retrieved data f	rom table, Contain_Episode and Program2,
Streaming Time	e Day Played
93	Thursday

10) Display Estimated Budget

User Interface
Display Estimated Budget
Program Title: A
Print
Result
Retrieved data from table Program 1 and Program2:
Estimated Budget
7000

11) Display Number Of Program in Each dayPlayed in Program2

Display all tuples in Program2: Display the result of query: **Display the Tuples in Program2** Display Number Of Program in Each dayPlayed in Program2 Submit Submit Display the Tuples in Contain_Episode Retrieved data from table Program2: Submit dayPlayed NumberOfProgram Title Episodes dayPlayed Sunday 2 Thursday Friday Thursday 1 Monday D 5 Friday Monday 1 E 7 Sunday 2 Sunday 3 Friday G 3 Friday 12) Display dayPlayed in which programs' average episodes is more than 5 in Program2 Display all tuples in Program2: Display the result of query: **Display the Tuples in Program2** Submit Display the Tuples in Contain_Episode Submit Display dayPlayed in which programs' average episodes is more than 5 in Program2

13) Display dayPlayed which have at least one program with more than 6 episodes in Program2

dayPlayed

Thursday

Retrieved data from table Program2:

Display all tuples in Program2: Display the result of query:

Title Episodes dayPlayedA 7 Thursday

Friday

Friday

Sunday

Sunday

Friday

Monday

B 3

D 5

E 7

2

3

C

Display the Tuples in Program2

Submit

Display the Tuples in Contain_Episode

Submit

Title Episodes dayPlayed

Thursday В Friday C D 2 Monday 5 Friday E Sunday F 2 Sunday G 3

Friday

Display program title in dayPlayed which have at least one program with more than 6 episodes in Program2

Submit

Retrieved data from table Program2:

Program Title

E F

A

14) Display Episode Title in all the programs in Contain_Episode

Display all tuples in Contain_Episode: Display the result of query:

Display the Tuples in Contain_Episode

Sul	bmit			
Titl	e Pro	ogramTitle ReleasedDat	e StreamingTime	
a1	A	22-NOV-21	999999	
a2	Α	07-OCT-21	110	
a3	Α	14-OCT-21	115	
a4	Α	21-OCT-21	118	
a5	Α	28-OCT-21	122	
a6	Α	22-NOV-21	1111	
a7	Α	11-NOV-21	125	
all	Α	11-NOV-21	120	
b 1	В	05-NOV-21	50	
b2	В	12-NOV-21	55	
b3	В	19-NOV-21	48	
all	В	11-NOV-21	60	
c1	C	08-NOV-21	90	
c2	C	15-NOV-21	95	
all	C	11-NOV-21	98	
d1	D	22-NOV-21	110	
d2	D	29-NOV-21	105	
d3	D	05-NOV-21	112	
d4	D	12-NOV-21	115	
d5	D	19-NOV-21	106	
all	D	11-NOV-21	110	
e1	Е	26-SEP-21	40	
e2	Е	03-OCT-21	45	
e3	E	10-OCT-21	46	
e4	Е	17-OCT-21	43	
e5	Е	24-OCT-21	44	
e6	E	31-OCT-21	45	
e7	Е	07-NOV-21	40	Display Enisada Titla in all the presence in Contain, Enisada
all	E	11-NOV-21	40	Display Episode Title in all the programs in Contain_Episode
f1	F	31-OCT-21	60	Submit
f2	F	07-NOV-21	65	
all	F	11-NOV-21	65	Retrieved data from table Contain_Episode,:
g 1	G	05-NOV-21	100	•
g2	G	12-NOV-21	105	Episode Title
g3	G	19-NOV-21	100	all
all	G	11-NOV-21	100	

15) Display Program and Episode Title with longest streaming time in Contain_Episode

Display all tuples in Contain_Episode: Display the result of query:

Display the Tuples in Contain_Episode

Sul	bmit			
Titl	le Prog	gramTitle ReleasedDat	e StreamingTime	
a1	Α	22-NOV-21	999999	
a2	Α	07-OCT-21	110	
a3	Α	14-OCT-21	115	
a4	Α	21-OCT-21	118	
a5	Α	28-OCT-21	122	
a6	Α	22-NOV-21	1111	
a7	Α	11-NOV-21	125	
all	Α	11-NOV-21	120	
b1	В	05-NOV-21	50	
b2	В	12-NOV-21	55	
b3	В	19-NOV-21	48	
all	В	11-NOV-21	60	
c1	C	08-NOV-21	90	
c2	C	15-NOV-21	95	
all	C	11-NOV-21	98	
d1	D	22-NOV-21	110	
d2	D	29-NOV-21	105	
d3	D	05-NOV-21	112	
d4	D	12-NOV-21	115	
d5	D	19-NOV-21	106	
all	D	11-NOV-21	110	
e1	E	26-SEP-21	40	
e2	E	03-OCT-21	45	
e3	E	10-OCT-21	46	
e4	E	17-OCT-21	43	Display Program and Episode Title with longest streaming time in Contain_Episode
e5	E	24-OCT-21	44	Submit
e6	E	31-OCT-21	45	
e7	E	07-NOV-21	40	
all	E	11-NOV-21	40	
f1	F	31-OCT-21	60	
f2	F	07-NOV-21	65	Retrieved data from table Contain_Episode,:
all	F	11-NOV-21	65	-
g1	G	05-NOV-21	100	Program Title Episode Title
g2	G	12-NOV-21	105	۸ ۵1
g3	G	19-NOV-21	100	A al
all	G	11-NOV-21	100	