

CPSC 304 Project Cover Page

Milestone #: __4__

Date: _2024-04-06_

Group Number: 13

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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

A short description of the final project, and what it accomplished.

- The project consists of a diary-tracking platform designed to provide users with a personalized space for recording and reflecting on their daily experiences, emotions, and activities.

In the final result, in addition to being able to register new users, it was able to accomplish various ways of data visualization for the user to summarize its data inputted.

b. A description of how your final schema differed from the schema you turned in.

i. If the final schema differed, explain why. Note that turning in a final schema that's different from what you planned is fine, we just want to know what changed and why.

- As mentioned by the TA, we expanded on the goallist type as our ERD needed to have a ISA relationship. So as a result, we have created PriorityGoals and NonPriorityGoals.
- As we went onto Milestone 4, most of the schemas (Years, Menu, Issue, Diary, EB) got changed by adding the user authentication ID for verification purposes. Also, the userID got changed from an INTEGER type to UUID type for security purposes.
- There is a schema added for the Goals being splitted into NonPriority and Priority Goals to ensure that there is an ISA relationship in the database. This is a total, disjoint ISA relationship.

Example:

Years(yearID, yearfield, Yeartheme, Dateofentry, Summary, **UserID**);

c. A copy of the schema and screenshots that show what data is present in each relation after the SQL script from item #2 is run.

Users (uID, uName, Email, Passw);

Years(yearID, yearfield, Yeartheme, Dateofentry, Summary, **UserID**);

Menu (Theme, MenuID, Description, **UserID**);

YearTheme(Yeartheme, Theme, Yearfield, MenuID, YearID);

Issue(issuedate, IssueID, issuenam, Resolved, Details, **UserID**, **YearID**);

IssueDateYear (issuedate, yearfield, IssueID, yeartheme, YearID,);

Diary (DiaryID, Diarytheme, **UserID**);

Entry (EntryID, **DiaryID**, Dateofdiaryentry, entrycomment, Emotions);

EB (Subtypes, EmotionID, yearfield, yeartheme, EntryID, **UserID**, **YearID**);

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EType ([Subtypes](#), [EmotionID](#), OverallTypes);

DiaryTheme ([Diarytheme](#), [Theme](#), [MenuID](#));

PriorityGoals ([GoalID](#), [Theme](#), Status, GoalDescription, SoftDeadline, [MenuID](#));

NonPriorityGoals ([GoalID](#), [Theme](#), Status, GoalDescription, Delegated, [MenuID](#));

Activity ([ActivityID](#), [EntryID](#), ActivityDescription, ActivityName);

HaveFriend ([UserID](#), [FriendID](#), PlaceMet);

ii. You can complete this deliverable with screenshots from SQL Plus or create a representation of your relational instances through a spreadsheet program. No matter what you use, be sure to clearly label which relation a given instance refers to.

CREATE TABLE Users (

uid UUID,

uName VARCHAR(1000) NOT NULL,

Email VARCHAR(1000) NOT NULL,

Passw VARCHAR(3000) NOT NULL,

PRIMARY KEY(uid),

UNIQUE(Email)

);

Query		Query History	
1	SELECT *		
2	FROM Users		
Data Output			
Messages			
Notifications			
uid	uname	email	passw
[PK] uid	character varying (1000)	character varying (1000)	character varying (3000)
1	111e4567-e89b-12d3-a456-5566424400...	Alice	alice@example.com
2	333e4567-e89b-12d3-a456-5566424400...	ree	ree@example.com
3	444e4567-e89b-12d3-a456-5566424400...	ad	ad@example.com
4	691e766a-714c-4512-a650-ecf17b40227d	Andy	andy@example.com

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CREATE TABLE Years(

yearID INTEGER,

yearfield INTEGER,

Yeartheme VARCHAR(50),

Dateofentry VARCHAR(20),

Summary VARCHAR(200),

UserID UUID NOT NULL,

PRIMARY KEY (YearID, Yeartheme, yearfield),

FOREIGN KEY (UserID) REFERENCES Users(uID) ON DELETE CASCADE

);

Query

Query History

1

SELECT *

2

FROM Years

Scratch Pad

X

Data Output

Messages

Notifications

yearid

[PK] integer

yearfield

[PK] integer

yeartheme

[PK] character varying (50)

dateofentry

character varying (20)

summary

character varying (200)

userid

uuid

1

1

2021

Starting Fitness Journey

2021-10-15

Time to go fit

111e4567-e89b-12d3-a456-5566424400...

2

2

2022

Internship Year

2022-07-10

Gaining practical experience

111e4567-e89b-12d3-a456-5566424400...

3

3

2023

Final Year Project

2023-05-20

Working on a groundbreaking project

111e4567-e89b-12d3-a456-5566424400...

4

4

2021

First Year at University

2021-09-15

Exciting new challenges

111e4567-e89b-12d3-a456-5566424400...

5

5

2022

Second Year at University

2022-09-15

More compsci yay

111e4567-e89b-12d3-a456-5566424400...

6

6

2023

Trip to Japan

2023-05-20

Trip LETS GO

111e4567-e89b-12d3-a456-5566424400...

7

7

2026

Career Launch

2026-08-30

Transitioning into the workforce

111e4567-e89b-12d3-a456-5566424400...

8

8

2028

Professional Growth

2028-03-15

Pursuing advanced certifications

111e4567-e89b-12d3-a456-5566424400...

9

9

2023

Third Year at University

2023-09-10

I hate finance

111e4567-e89b-12d3-a456-5566424400...

10

10

2024

Fourth Year at University

2024-09-10

cpsc 304 my beloved

111e4567-e89b-12d3-a456-5566424400...

11

11

2022

First Year with Honours

2022-4-27

A hard year because of cpsc 121

111e4567-e89b-12d3-a456-5566424400...

12

12

2023

Second Year with Honours

2023-4-27

A hard year because of cpsc 213

111e4567-e89b-12d3-a456-5566424400...

13

13

2024

Third Year with Honours

2024-4-27

A hard year because of comm 306

111e4567-e89b-12d3-a456-5566424400...

14

114

2021

First Year with Honours

2021-1-12

A hard year because of cpsc 121

691e766a-714c-4512-a650-ecf17b40227d

15

115

2022

First Year with Honours

2022-1-12

A hard year because of cpsc 121

691e766a-714c-4512-a650-ecf17b40227d

16

116

2023

First Year with Honours

2023-1-12

A hard year because of cpsc 121

691e766a-714c-4512-a650-ecf17b40227d

17

117

2024

First Year with Honours

2024-1-12

A hard year because of cpsc 121

691e766a-714c-4512-a650-ecf17b40227d

18

118

2023

Second Year with Honours

2023-7-9

Cpsc 210 my beloved

691e766a-714c-4512-a650-ecf17b40227d

19

119

2024

Third Year with Honours

2024-8-12

I do not like finance

691e766a-714c-4512-a650-ecf17b40227d

20

120

2022

Second Year with Honours

2022-7-9

Cpsc 210 my beloved

691e766a-714c-4512-a650-ecf17b40227d

21

121

2023

Third Year with Honours

2023-8-12

I do not like finance

691e766a-714c-4512-a650-ecf17b40227d

22

122

2021

Second Year with Honours

2021-7-9

Cpsc 210 my beloved

691e766a-714c-4512-a650-ecf17b40227d

23

123

2024

Second Year with Honours

2024-7-9

Cpsc 210 my beloved

691e766a-714c-4512-a650-ecf17b40227d

24

124

2021

Third Year with Honours

2021-8-12

I do not like finance

691e766a-714c-4512-a650-ecf17b40227d

25

125

2022

Third Year with Honours

2022-8-12

I do not like finance

691e766a-714c-4512-a650-ecf17b40227d

26

126

2021

Third Year with Honours

2021-8-12

I do not like hacks

691e766a-714c-4512-a650-ecf17b40227d

27

127

2022

Third Year with Honours

2022-8-12

I do not like hacks

691e766a-714c-4512-a650-ecf17b40227d

28

128

2023

Third Year with Honours

2023-8-12

I do not like hacks

691e766a-714c-4512-a650-ecf17b40227d

29

129

2024

Third Year with Honours

2024-8-12

I do not like hacks

691e766a-714c-4512-a650-ecf17b40227d

Total rows: 34 of 34

Query complete 00:00:00.201

Ln 2, Col 1

Successfully run. Total query runtime: 201 msec. 34 rows affected.

X

CREATE TABLE Menu (

```
Theme VARCHAR(50),

MenuID Integer,

Description VARCHAR(200),

UserID UUID NOT NULL,

PRIMARY KEY(Theme, MenuID),

FOREIGN KEY(UserID) REFERENCES Users(uid) ON DELETE CASCADE

);
```

Query

Query History

1

SELECT *

2

FROM Menu

Data Output

Messages

Notifications

	theme [PK] character varying (50)	menuid [PK] integer	description character varying (200)	userid uuid
1	Fitness	1	Running, yoga, weightlifting	111e4567-e89b-12d3-a456-5566424400...
2	Career	2	Project deadlines, networking events	111e4567-e89b-12d3-a456-5566424400...
3	Finance	3	Budget planning, investment strategies	111e4567-e89b-12d3-a456-5566424400...
4	Social	4	Networking events, social gatherings, trips	111e4567-e89b-12d3-a456-5566424400...
5	Hobbies	5	Photography, painting, gardening	111e4567-e89b-12d3-a456-5566424400...
6	Health and Fitness	6	Soccer, basketball, badminton, etc	691e766a-714c-4512-a650-ecf17b40227d
7	Academics	7	Midterms and finals date, assignments due, etc	691e766a-714c-4512-a650-ecf17b40227d

```
CREATE TABLE YearTheme(

    Yeartheme VARCHAR(50),

    Theme VARCHAR(50) NOT NULL,

    Yearfield INTEGER NOT NULL,

    MenuID Integer NOT NULL,

    YearID Integer NOT NULL,

    UNIQUE(YearID),

    PRIMARY KEY (Yeartheme, YearID),

    FOREIGN KEY (Theme, MenuID) REFERENCES Menu(Theme, MenuID),

    FOREIGN KEY (YearID, YearTheme, Yearfield) REFERENCES Years(YearID, Yeartheme, Yearfield)
```

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);

Query

Query History

1

SELECT *

2

FROM Yeartheme

Scratch Pad

X

Data Output

Messages

Notifications

	yeartheme [PK] character varying (50)	theme character varying (50)	yearfield integer	menuid integer	yearid [PK] integer
1	Starting Fitness Journey	Fitness	2021	1	1
2	Internship Year	Career	2022	2	2
3	Final Year Project	Career	2023	2	3
4	First Year at University	Fitness	2021	1	4
5	Second Year at University	Career	2022	2	5
6	Trip to Japan	Social	2023	4	6
7	Career Launch	Career	2026	2	7
8	Professional Growth	Career	2028	2	8
9	Third Year at University	Career	2023	2	9
10	Fourth Year at University	Career	2024	2	10
11	First Year with Honours	Career	2022	2	11
12	Second Year with Honours	Career	2023	2	12
13	Third Year with Honours	Career	2024	2	13
14	First Year with Honours	Academics	2021	7	114
15	First Year with Honours	Academics	2022	7	115
16	First Year with Honours	Academics	2023	7	116
17	First Year with Honours	Academics	2024	7	117
18	Second Year with Honours	Academics	2023	7	118
19	Third Year with Honours	Academics	2024	7	119
20	Second Year with Honours	Academics	2022	7	120
21	Third Year with Honours	Academics	2023	7	121
22	Second Year with Honours	Academics	2021	7	122
23	Second Year with Honours	Academics	2024	7	123
24	Third Year with Honours	Academics	2021	7	124
25	Third Year with Honours	Academics	2022	7	125
26	Third Year with Honours	Academics	2021	7	126
27	Third Year with Honours	Academics	2022	7	127
28	Third Year with Honours	Academics	2023	7	128
29	Third Year with Honours	Academics	2024	7	129

Total rows: 34 of 34

Query complete 00:00:00.521

Ln 2, Col 15

CREATE TABLE Issue(

issuedate VARCHAR(20),

IssueID INTEGER,

issuename VARCHAR(50),

Resolved BOOLEAN,

Details VARCHAR(200),

UserID UUID NOT NULL,

YearID Integer NOT NULL,

PRIMARY KEY (IssueID),

FOREIGN KEY (UserID) REFERENCES Users(uid) ON DELETE CASCADE,

FOREIGN KEY (YearID) REFERENCES YearTheme(YearID)

);

Query

Query History

1

SELECT *

2

FROM Issue

Scratch Pad

X

Data Output

Messages

Notifications

issuedate

character varying (20)

issueid

[PK] integer

issuename

character varying (50)

resolved

boolean

details

character varying (200)

userid

uuid

yearid

integer

1

2022-8-10

10

Project Deadline

false

Facing tight deadlines at work

111e4567-e89b-12d3-a456-5566424400...

5

2

2023-7-25

11

Research Challenges

false

Encountering difficulties in data analysis

111e4567-e89b-12d3-a456-5566424400...

3

3

2022-6-15

12

Career Transition

false

Uncertainty about future career path

111e4567-e89b-12d3-a456-5566424400...

5

4

2021-4-22

13

Academic Concession

false

Not feeling well today

111e4567-e89b-12d3-a456-5566424400...

4

5

2022-4-22

14

Academic Concession

false

Not feeling well today

111e4567-e89b-12d3-a456-5566424400...

5

6

2023-4-22

15

Academic Concession

false

Not feeling well today

111e4567-e89b-12d3-a456-5566424400...

9

7

2024-4-22

16

Academic Concession

false

Not feeling well today

111e4567-e89b-12d3-a456-5566424400...

10

8

2023-5-21

17

Broke

false

Wdym tickets are \$1000 now

111e4567-e89b-12d3-a456-5566424400...

6

9

2021-4-22

114

Academic Concession

false

Not feeling well today

691e766a-714c-4512-a650-ecf17b40227d

114

10

2022-4-22

115

Academic Concession

false

Not feeling well today

691e766a-714c-4512-a650-ecf17b40227d

115

11

2023-4-22

116

Academic Concession

false

Not feeling well today

691e766a-714c-4512-a650-ecf17b40227d

116

12

2024-4-22

117

Academic Concession

false

Not feeling well today

691e766a-714c-4512-a650-ecf17b40227d

117

13

2023-5-16

118

Challenge

false

Cpsc 213 assignment is too hard

691e766a-714c-4512-a650-ecf17b40227d

118

14

2024-3-15

119

Teamwork

true

had a fight with my teammate today

691e766a-714c-4512-a650-ecf17b40227d

119

15

2022-5-16

120

Challenge

false

Cpsc 304 assignment is too hard

691e766a-714c-4512-a650-ecf17b40227d

120

16

2023-3-15

121

Teamwork

true

had a fight with my teammate today

691e766a-714c-4512-a650-ecf17b40227d

121

17

2021-5-16

122

Challenge

false

Cpsc 110 assignment is too hard

691e766a-714c-4512-a650-ecf17b40227d

122

18

2024-5-16

123

Challenge

false

Cpsc 404 assignment is too hard

691e766a-714c-4512-a650-ecf17b40227d

123

19

2021-3-15

124

Teamwork

true

had a fight with my colleagues today

691e766a-714c-4512-a650-ecf17b40227d

124

20

2022-3-15

125

Teamwork

true

had a fight with my dog today

691e766a-714c-4512-a650-ecf17b40227d

125

21

2021-4-18

126

Hackathon

true

had a demo today

691e766a-714c-4512-a650-ecf17b40227d

126

22

2022-4-18

127

Hackathon

true

had a demo today

691e766a-714c-4512-a650-ecf17b40227d

127

23

2023-4-18

128

Hackathon

true

had a demo today

691e766a-714c-4512-a650-ecf17b40227d

128

24

2024-4-18

129

Hackathon

true

had a demo today

691e766a-714c-4512-a650-ecf17b40227d

129

25

2021-5-18

130

Hospital

false

had a coma today

691e766a-714c-4512-a650-ecf17b40227d

130

26

2022-5-18

131

Movie

true

had a movie today

691e766a-714c-4512-a650-ecf17b40227d

131

27

2021-7-22

132

Academic Concession

false

had a concession today

691e766a-714c-4512-a650-ecf17b40227d

131

28

2022-7-22

133

Academic Concession

false

had a concession today

691e766a-714c-4512-a650-ecf17b40227d

131

29

2023-7-22

134

Academic Concession

false

had a concession today

691e766a-714c-4512-a650-ecf17b40227d

131

Total rows: 29 of 29

Query complete 00:00:00.670

Ln 2, Col 11

CREATE TABLE IssueDateYear(

issuedate VARCHAR(20),

yearfield INTEGER NOT NULL,

IssueID Integer NOT NULL,

yeartheme VARCHAR(50) NOT NULL,

YearID Integer NOT NULL,

PRIMARY KEY (issuedate, YearID),

FOREIGN KEY (yearID, yearfield, yeartheme) REFERENCES Years(yearID, yearfield, yeartheme),

FOREIGN KEY (IssueID) REFERENCES Issue(IssueID)

);

QueryQuery History

Scratch Pad ✕

1 SELECT *

2 FROM IssueDateYear

Data OutputMessagesNotifications

	issuedate [PK] character varying (20)	yearfield integer	issueid integer	yeartheme character varying (50)	yearid [PK] integer
1	2021-4-22	2021	13	First Year at University	4
2	2022-4-22	2022	14	Second Year at Universi...	5
3	2023-4-22	2023	15	Third Year at University	9
4	2024-4-22	2024	16	Fourth Year at University	10
5	2022-8-10	2022	12	Internship Year	2
6	2023-7-25	2023	11	Final Year Project	3
7	2024-6-15	2026	12	Career Launch	7
8	2025-5-01	2028	12	Professional Growth	8
9	2025-3-10	2023	10	Trip to Japan	6
10	2021-4-22	2021	114	First Year with Honours	114
11	2022-4-22	2022	115	First Year with Honours	115
12	2023-4-22	2023	116	First Year with Honours	116
13	2024-4-22	2024	117	First Year with Honours	117
14	2023-5-16	2023	118	Second Year with Hono...	118
15	2024-3-15	2024	119	Third Year with Honours	119
16	2022-5-16	2022	120	Second Year with Hono...	120
17	2023-3-15	2023	121	Third Year with Honours	121
18	2021-5-16	2021	122	Second Year with Hono...	122
19	2024-5-16	2024	123	Second Year with Hono...	123
20	2021-3-15	2021	124	Third Year with Honours	124
21	2022-3-15	2022	125	Third Year with Honours	125
22	2021-4-18	2021	126	Third Year with Honours	126
23	2022-4-18	2022	127	Third Year with Honours	127
24	2023-4-18	2023	128	Third Year with Honours	128
25	2024-4-18	2024	129	Third Year with Honours	129
26	2021-5-18	2021	130	Fourth Year with Honou...	130
27	2022-5-18	2022	131	Fourth Year with Honou...	131
28	2021-7-22	2021	132	Second Year with Hono...	132
29	2022-7-22	2022	133	Third Year with Honours	133

✓ Successfully run. Total query runtime: 244 msec. 30 rows affected. ✕

Total rows: 30 of 30

Query complete 00:00:00.244

Ln 2. Col 19

CREATE TABLE Diary (

 DiaryID INTEGER,

 Diarytheme VARCHAR(50) NOT NULL,

 UserID UUID NOT NULL,








 PRIMARY KEY(DiaryID),

 FOREIGN KEY (UserID) REFERENCES Users(uID) ON DELETE CASCADE

);

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Query		Query History	
1	SELECT *		
2	FROM Diary		
Data Output		Messages	Notifications
<div></div>			
	diaryid [PK] integer	diarytheme character varying (50)	userid uuid
1	101	Work	111e4567-e89b-12d3-a456-5566424400...
2	102	Health	111e4567-e89b-12d3-a456-5566424400...
3	103	Social	111e4567-e89b-12d3-a456-5566424400...
4	104	Career	111e4567-e89b-12d3-a456-5566424400...
5	105	Fitness	111e4567-e89b-12d3-a456-5566424400...
6	106	Hobbies	111e4567-e89b-12d3-a456-5566424400...
7	110	Finance	111e4567-e89b-12d3-a456-5566424400...
8	1111	Work	691e766a-714c-4512-a650-ecf17b40227d
9	1112	Health	691e766a-714c-4512-a650-ecf17b40227d
10	1113	Social	691e766a-714c-4512-a650-ecf17b40227d

CREATE TABLE Entry (

EntryID Integer,

DiaryID INTEGER NOT NULL,

Dateofdiaryentry VARCHAR(20) NOT NULL,

entrycomment VARCHAR(200) NOT NULL,

Emotions VARCHAR(200) NOT NULL,

PRIMARY KEY (EntryID),

FOREIGN KEY (DiaryID) REFERENCES Diary ON DELETE CASCADE

);

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Query Query History						Scratch Pad X
1	SELECT *					
2	FROM Entry					
Data Output Messages Notifications						
	entryid [PK] integer	diaryid integer	dateofdiaryentry character varying (20)	entrycomment character varying (200)	emotions character varying (200)	
1	1	101	2022-02-26	Completed a major milestone at work t...	Accomplished	
2	2	102	2023-02-25	Feeling energetic after morning yoga.	Energetic	
3	3	103	2024-02-24	Enjoyed a night out with friends.	Joyful	
4	4	104	2022-02-26	Applied for a new position today.	Hopeful	
5	5	105	2023-02-25	Achieved a new personal best in running.	Accomplished	
6	6	106	2024-02-24	Completed my first painting.	Proud	
7	7	101	2022-05-15	Completed a major project at work.	Accomplished	
8	8	105	2023-04-20	Started a new fitness regimen.	Determined	
9	9	103	2024-03-10	Attended a networking event.	Social	
10	10	110	2025-02-28	Reviewed investment portfolio.	Focused	
11	11	106	2025-01-05	Experimented with new painting techni...	Creative	
12	12	106	2021-04-07	Bought new merch smile	Happy	
13	13	101	2026-10-13	Earned my first paycheck	Accomplished	
14	14	101	2028-12-15	Rose up the ladder	Accomplished	
15	15	101	2023-04-14	Studied for finals	Motivated	
16	16	101	2024-04-14	Studied for finals	Motivated	
17	17	101	2025-04-14	Studied for finals	Motivated	
18	114	1111	2022-02-26	Today was a productive day at work.	Happy	
19	118	1112	2023-02-25	Feeling a bit under the weather today.	Sick	
20	119	1113	2024-02-24	Had a great time with friends at the	Joyful	
21	120	1112	2022-02-25	Feeling a bit under the weather today.	Sick	
22	121	1113	2023-02-24	Had a great time with friends at the	Joyful	
23	122	1111	2021-02-24	Worked hard	Anxious	
24	123	1111	2024-02-24	Worked very hard	Happy	
25	124	1113	2021-02-24	Pulled all nighter	Tiring	
26	125	1113	2022-02-24	Chill	Joyful	
27	126	1111	2021-02-24	Hacked	EnJoyful	
28	127	1111	2022-02-24	Hacked	EnJoyful	
29	128	1111	2023-02-24	Hacked	EnJoyful	
Total rows: 35 of 35 Query complete 00:00:00.458						Ln 2, Col 11

CREATE TABLE EB(

Subtypes VARCHAR(200),

EmotionID INTEGER,

yearfield INTEGER NOT NULL,

yeartheme VARCHAR(50) NOT NULL,

EntryID INTEGER NOT NULL,

UserID UUID NOT NULL,

YearID Integer NOT NULL,

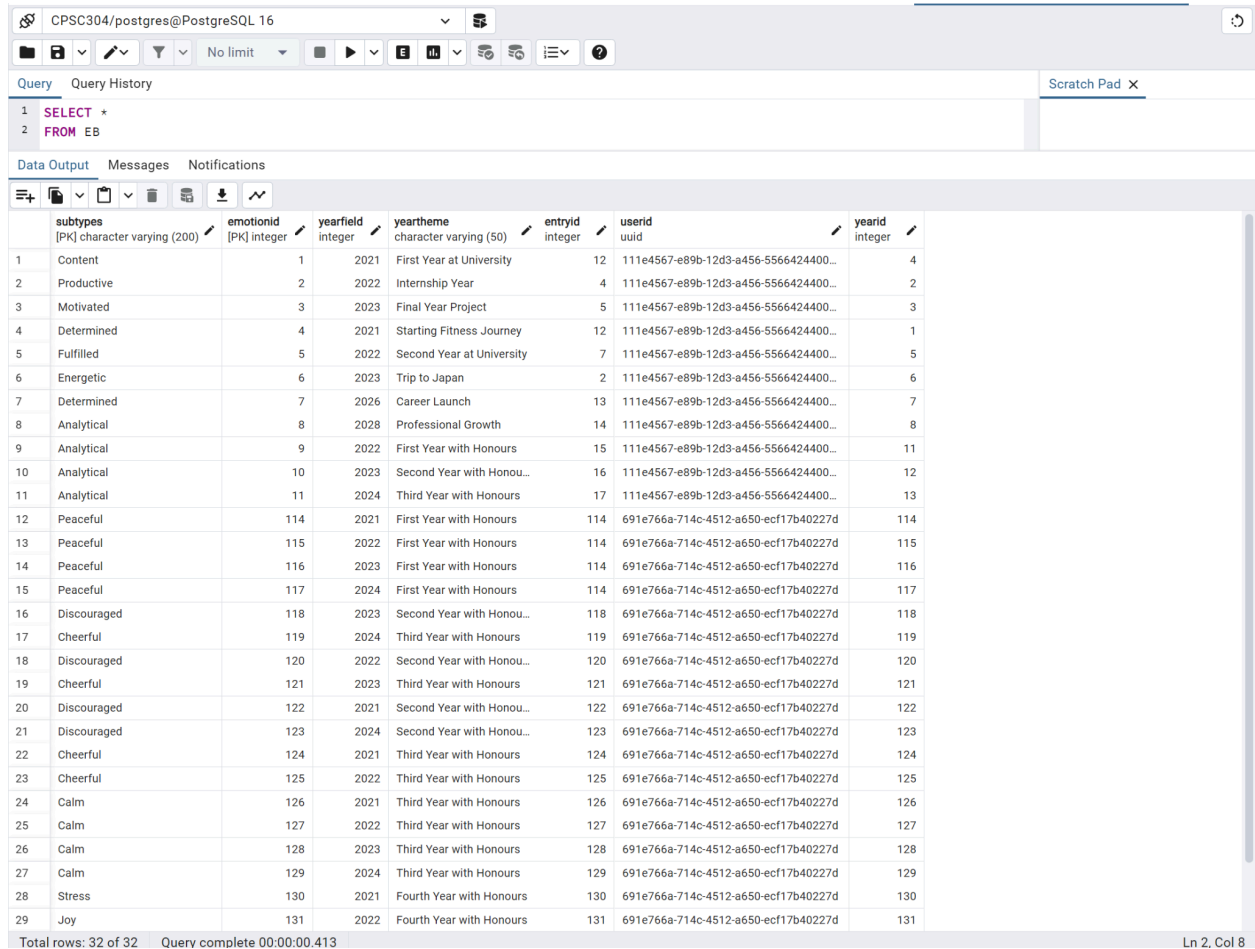
PRIMARY KEY (Subtypes, EmotionID),

FOREIGN KEY (YearID, yearfield, yeartheme) REFERENCES Years(YearID, yearfield, yeartheme),

FOREIGN KEY (EntryID) REFERENCES Entry,

FOREIGN KEY (UserID) REFERENCES Users(uID) ON DELETE CASCADE

);



The screenshot shows a PostgreSQL query editor interface. The query window contains the following SQL:

```
1 SELECT *
2 FROM EB
```

The 'Data Output' tab is active, displaying a table with 32 rows and 9 columns. The columns are: subtypes (PK) character varying (200), emotionid (PK) integer, yearfield integer, yeartheme character varying (50), entryid integer, userid uuid, yearid integer, and two unnamed columns. The data is as follows:

	subtypes [PK] character varying (200)	emotionid [PK] integer	yearfield integer	yeartheme character varying (50)	entryid integer	userid uuid	yearid integer	
1	Content	1	2021	First Year at University	12	111e4567-e89b-12d3-a456-5566424400...	4	
2	Productive	2	2022	Internship Year	4	111e4567-e89b-12d3-a456-5566424400...	2	
3	Motivated	3	2023	Final Year Project	5	111e4567-e89b-12d3-a456-5566424400...	3	
4	Determined	4	2021	Starting Fitness Journey	12	111e4567-e89b-12d3-a456-5566424400...	1	
5	Fulfilled	5	2022	Second Year at University	7	111e4567-e89b-12d3-a456-5566424400...	5	
6	Energetic	6	2023	Trip to Japan	2	111e4567-e89b-12d3-a456-5566424400...	6	
7	Determined	7	2026	Career Launch	13	111e4567-e89b-12d3-a456-5566424400...	7	
8	Analytical	8	2028	Professional Growth	14	111e4567-e89b-12d3-a456-5566424400...	8	
9	Analytical	9	2022	First Year with Honours	15	111e4567-e89b-12d3-a456-5566424400...	11	
10	Analytical	10	2023	Second Year with Honou...	16	111e4567-e89b-12d3-a456-5566424400...	12	
11	Analytical	11	2024	Third Year with Honours	17	111e4567-e89b-12d3-a456-5566424400...	13	
12	Peaceful	114	2021	First Year with Honours	114	691e766a-714c-4512-a650-ecf17b40227d	114	
13	Peaceful	115	2022	First Year with Honours	114	691e766a-714c-4512-a650-ecf17b40227d	115	
14	Peaceful	116	2023	First Year with Honours	114	691e766a-714c-4512-a650-ecf17b40227d	116	
15	Peaceful	117	2024	First Year with Honours	114	691e766a-714c-4512-a650-ecf17b40227d	117	
16	Discouraged	118	2023	Second Year with Honou...	118	691e766a-714c-4512-a650-ecf17b40227d	118	
17	Cheerful	119	2024	Third Year with Honours	119	691e766a-714c-4512-a650-ecf17b40227d	119	
18	Discouraged	120	2022	Second Year with Honou...	120	691e766a-714c-4512-a650-ecf17b40227d	120	
19	Cheerful	121	2023	Third Year with Honours	121	691e766a-714c-4512-a650-ecf17b40227d	121	
20	Discouraged	122	2021	Second Year with Honou...	122	691e766a-714c-4512-a650-ecf17b40227d	122	
21	Discouraged	123	2024	Second Year with Honou...	123	691e766a-714c-4512-a650-ecf17b40227d	123	
22	Cheerful	124	2021	Third Year with Honours	124	691e766a-714c-4512-a650-ecf17b40227d	124	
23	Cheerful	125	2022	Third Year with Honours	125	691e766a-714c-4512-a650-ecf17b40227d	125	
24	Calm	126	2021	Third Year with Honours	126	691e766a-714c-4512-a650-ecf17b40227d	126	
25	Calm	127	2022	Third Year with Honours	127	691e766a-714c-4512-a650-ecf17b40227d	127	
26	Calm	128	2023	Third Year with Honours	128	691e766a-714c-4512-a650-ecf17b40227d	128	
27	Calm	129	2024	Third Year with Honours	129	691e766a-714c-4512-a650-ecf17b40227d	129	
28	Stress	130	2021	Fourth Year with Honours	130	691e766a-714c-4512-a650-ecf17b40227d	130	
29	Joy	131	2022	Fourth Year with Honours	131	691e766a-714c-4512-a650-ecf17b40227d	131	

Total rows: 32 of 32 Query complete 00:00:00.413 Ln 2, Col 8

CREATE TABLE EBType(

Subtypes VARCHAR(200),

EmotionID INTEGER NOT NULL,

OverallTypes VARCHAR(50),

PRIMARY KEY (Subtypes, EmotionID),

FOREIGN KEY (Subtypes, EmotionID) REFERENCES EB(Subtypes, EmotionID)

);

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Query Query History			
1	SELECT *		
2	FROM EBSys		
Data Output Messages Notifications			
	subtypes [PK] character varying (200)	emotionid [PK] integer	overalltypes character varying (50)
1	Content	1	Happy
2	Productive	2	Accomplished
3	Motivated	3	Energetic
4	Fulfilled	5	Happy
5	Energetic	6	Energetic
6	Determined	7	Confident
7	Analytical	8	Focused
8	Peaceful	114	Happy
9	Discouraged	118	Sad
10	Cheerful	119	Happy
11	Discouraged	120	Sad
12	Cheerful	121	Happy
13	Discouraged	122	Gloomy
14	Discouraged	123	Depressed
15	Cheerful	124	Energetic
16	Cheerful	125	Excited
17	Calm	126	Enjoy
18	Calm	127	Enjoy
19	Calm	128	Enjoy
20	Calm	129	Enjoy
21	Stress	130	Stressed
22	Joy	131	Jubilant
23	Desparation	132	Stresse
24	Desparation	133	Stresse
25	Desparation	134	Stresse

```
CREATE TABLE DiaryTheme (  
    Diarytheme VARCHAR(50) NOT NULL,  
    Theme VARCHAR(50) NOT NULL,  
    MenuID INTEGER NOT NULL,  
    DiaryID INTEGER NOT NULL,  
    PRIMARY KEY(Diarytheme),  
    FOREIGN KEY (Theme, MenuID) REFERENCES Menu(Theme, MenuID),  
    FOREIGN KEY (DiaryID) REFERENCES Diary(DiaryID)  
);
```

Query

Query History

1

SELECT *

2

FROM diarytheme

Data Output

Messages

Notifications

	diarytheme [PK] character varying (50)	theme character varying (50)	menuid integer	diaryid [PK] integer
1	Work	Career	2	104
2	Japan Trip	Social	4	103
3	First Year With Honours	Career	2	104
4	Health	Fitness	1	105
5	Watersports	Hobbies	5	106
6	Work	Academics	7	1111
7	Health	Health and Fitness	6	1112
8	Social	Health and Fitness	6	1113

CREATE TABLE PriorityGoals (

 GoalID INTEGER,

 Theme VARCHAR(50) NOT NULL,

 Status BOOLEAN NOT NULL,

 GoalDescription VARCHAR(200) NOT NULL,

 SoftDeadline VARCHAR(20),

 MenuID INTEGER NOT NULL,

 PRIMARY KEY(GoalID),

 FOREIGN KEY (Theme, MenuID) REFERENCES Menu(Theme, MenuID)

);

Query

Query History

1

SELECT *

2

FROM prioritygoals

Data Output

Messages

Notifications

	goalid [PK] integer	theme character varying (50)	status boolean	goaldescription character varying (200)	softdeadline character varying (20)	menuid integer
1	1	Career	true	Complete certification course	2025-12-31	2
2	2	Fitness	true	Run a half-marathon	2023-06-30	1
3	3	Finance	false	Start investing in stocks	[null]	3
4	4	Hobbies	true	Learn to play the guitar	2024-01-31	5
5	5	Social	false	Attend networking events	[null]	4

```
CREATE TABLE NonPriorityGoals(  
    GoalID INTEGER,  
    Theme VARCHAR(50) NOT NULL,  
    Status BOOLEAN NOT NULL,  
    GoalDescription VARCHAR(200) NOT NULL,  
    Delegated BOOLEAN,  
    MenuID INTEGER NOT NULL,  
    PRIMARY KEY(GoalID),  
    FOREIGN KEY (Theme, MenuID) REFERENCES Menu  
);
```

Query

Query History

```

1 SELECT *
2 FROM nonprioritygoals

```

Data Output

Messages

Notifications

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	goalid [PK] integer	theme character varying (50)	status boolean	goaldescription character varying (200)	delegated boolean	menuid integer
1		1 Career	false	Attend industry conferences	true	2
2		2 Fitness	false	Try rock climbing	false	1
3		3 Finance	true	Create a budget plan	false	3
4		4 Hobbies	false	Visit an art museum	false	5
5		5 Social	true	Host a dinner party	false	4

```
CREATE TABLE Activity (  
    ActivityID INTEGER,  
    EntryID Integer NOT NULL,  
    ActivityDescription VARCHAR(200),  
    ActivityName VARCHAR(50) NOT NULL,  
    PRIMARY KEY (ActivityID, EntryID),  
    FOREIGN KEY (EntryID) REFERENCES Entry
```

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);

Query

Query History

1

SELECT *

2

FROM activity

Data Output

Messages

Notifications

	activityid [PK] integer	entryid [PK] integer	activitydescription character varying (200)	activityname character varying (50)
1	1	1	Attended a certification workshop	Professional Development
2	2	2	Completed a 10k run	Running
3	3	9	Attended a finance seminar	Financial Education
4	4	13	Practiced guitar for 1 hour	Music
5	5	3	Met with friends for coffee	Socializing

CREATE TABLE HaveFriend(

UserID UUID,

FriendID UUID,

PlaceMet VARCHAR(50),

PRIMARY KEY (UserID, FriendID),

FOREIGN KEY (FriendID) REFERENCES Users(uid) ON DELETE CASCADE,

FOREIGN KEY (UserID) REFERENCES Users(uid) ON DELETE CASCADE

);

Query

Query History

1

SELECT *

2

FROM havefriend

Data Output

Messages

Notifications

	<div>userid</div> <div>[PK] uuid</div>	<div>friendid</div> <div>[PK] uuid</div>	<div>placemet</div> <div>character varying (50)</div>
1	111e4567-e89b-12d3-a456-556642440000	333e4567-e89b-12d3-a456-556642440002	Coffee Shop
2	111e4567-e89b-12d3-a456-556642440000	444e4567-e89b-12d3-a456-556642440003	Gym

d. A list of all SQL queries used and where it can be found in the code (i.e., file name and line number(s)). For SQL query requirements, check the rubric listed on Canvas for Milestone 4.

INSERT (server/main.py ^ Line 93-123) Query in line 107

DELETE (server/main.py ^ Line 219-228) Query in line 220

UPDATE (server/main.py ^ 157-228) Query in line 187, 197 and 213

SELECTION (server/main.py ^ Line 310 to 325) Query in line 310-320

PROJECTION (server/main.py ^ Line 326 to 343) Query in line 326-338

JOIN (server/main.py ^ Line 526 to line 560) Query in line 532-544

AGGREGATION WITH GROUP BY (server/main.py ^ Line 358-400) Query in line 369-395

AGGREGATION WITH HAVING (server/main.py ^ Line 401-456) Query in line 443-456

NESTED AGGREGATION WITH GROUP BY (server/main.py ^ Line 402-442) Query in line 415-442

DIVISION (server/main.py ^ Line 466-485) Query in Line 472-484

e. Screenshots demonstrating the functionality of each query using the GUI. We want to see a before/during/after progression of events. For example, the before screenshot would be what data is in the table before you run the query, the during screenshot(s) is how the query is triggered using the GUI, and the after screenshot is what data is in your table afterwards. Please label each set of screenshots with the name of the query it is meant to address (e.g., "Insert Operation").