

CPSC 304 Project Cover Page

Milestone #: 4

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Group Number: 86

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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.

SQL SCRIPT

https://github.students.cs.ubc.ca/CPSC304-2022W-T1/project_c3g2c_i5p4s_k7d2b/blob/main/projectDDL.sql

Repository Link

https://github.students.cs.ubc.ca/CPSC304-2022W-T1/project_c3g2c_i5p4s_k7d2b

Description

Meet is a networking database application that allows users to create accounts (along with a profile), network with other individuals of similar interests, and share posts for others to see. The application mainly focuses on storing, managing , and accessing data within a database which allows for easy use and customizability to accommodate the needs of various individuals.

The domain of this application includes user information (such as name, email, interests, etc.), events that occur in both communities and groups, and posts from individuals. Users are able to navigate through the events by using various functions that can be searched by name, keyword, or community. Users are able to participate in various events in both community and group settings which allows networking in both large and small group environments.

There is a lot of future potential for Meet as it accommodates the needs of the users by providing various ways of organizing and accessing data. The ease of use of this application benefits both users and organizers alike by providing a platform for people to connect.

This project is built with HTML for the front-end user interface and Oracle as DBMS, along with PHP that joins the front-end with the back-end database.

Changes to Schema

- Added age to profiles so we can do nested aggregation with group by
- Removed on update cascades because oracle doesn't support it
- Naming for group changed to circle because oracle doesn't allow for tables to be named group
- Split RSVP into RSVPCommunity and RSVPGroup because one table cannot refer to two separate tables
- Renamed date in communityevent and groupmeetup to event_date because oracle doesn't allow for attributes to be named as date.
- userID is now CHAR[] instead of INT to be more accurate to a social media site

Final Schema

Profile(UserID: char(80), Name: char(80) , Faculty: char(80), Pronouns: char(50), Interest: char(100), **Email: char(80)**, Age: INT, **GroupID: int**, **BuddyID: int**) (email needs to be unique, GroupID is not null)

USERID	NAME	FACULTY	PRONOUNS	INTEREST	EMAIL	AGE	GROUPID	BUDDYID
<dbl>	<chr>	<chr>	<chr>	<chr>	<chr>	<int>	<int>	<lgl>
1000	Chris Woojin Lee	Science	he,him,his	Golf, Lasagna	chriswojinlee@gmail.com	20	1	NA
1001	Trevor Dang	Engineering	he,him,his	Golf, Lacrosse	trevordang@gmail.com	19	1	NA
1002	Ryan Gao	Science	he,him,his	Badminton, School	ryangao@gmail.com	19	1	NA
1003	Edward Chong	Science	he,him,his	Badminton, School	edwardchong@gmail.com	19	1	NA
1004	Alex Wang	Forestry	they, them	Trees, Wood	alexwang@gmail.com	19	2	NA
1005	Maddie Zhang	Arts	she, her, hers	Trees, Environment	maddiezhang@gmail.com	19	2	NA

Posts(**UserID: int**, Caption: char(100), Mood: char(100) (UserID is not null)

USERID	CAPTION	MOOD
<dbl>	<chr>	<chr>
1000	I applied to another job	Neutral
1001	I love ATSC	Happy
1002	I miss Lincoln	Sad
1003	320 is the best!	Excited
1004	I like hikes	Happy

Account(Email: char(80), Password: char(80))

EMAIL	PASSWORD
<chr>	<chr>
chriswojinlee@gmail.com	Woojin
trevordang@gmail.com	WakeUpEarly
ryangao@gmail.com	Lincoln#1
edwardchong@gmail.com	WhatIsBreakfast
alexwang@gmail.com	abcde
maddiezhang@gmail.com	12345

Circle(GroupID: int, Name: char(80), **RoomID: int**) (RoomID needs to be unique)

GROUPID	NAME	ROOMID
<int>	<chr>	<int>
1	Sports	1111
2	Nature	1112
3	Cooking	1113
4	School	1114
5	Drawing	1115

ChatRoom(RoomID: int, Name: char(80))

ROOMID	NAME
<int>	<chr>
1111	Sports Chat
1112	Nature Chat
1113	Cooking Chat
1114	School Chat
1115	Drawing Chat

Community(CID: int, name: char(80), **topic: char(100)**)

CID	NAME	TOPIC
<int>	<chr>	<chr>
1001	Buff	Fitness
1002	Trees	Environment
1003	Artsy	Arts
1004	Sciece is cool	Science
1005	Big Brains	Engineering

Community_Topic(topic: char(100), category: char(80))

TOPIC	CATEGORY
<chr>	<chr>
Fitness	Movement
Environment	Outdoors
Arts	School Faculty
Science	School Faculty
Engineering	School Faculty

CommunityEvent(EventID: int, name: char(80), Event_Date: date, **Location**: char(80), **CID**: int)

EVENTID	NAME	EVENT_DATE	LOCATION	CID
<int>	<chr>	<chr>	<chr>	<int>
1201	Marathon Sunday!	03-MAR-23	Vancouver	1001
1202	Pilates with Bunnies	04-APR-23	UBC	1003
1203	Grouse Grind!	05-MAY-23	Grouse Mountain	1002
1204	nwHacks Hackathon	14-JAN-23	UBC	1004
1205	Halloween Social	31-OCT-23	UBC	1003
1206	Christmas Social	31-OCT-23	Vancouver Convention Centre	1005

CommunityEvent_Venues(delivery mode: char(80), Location: char(80))

LOCATION	DELIVERY_MODE
<chr>	<chr>
Vancouver	in-person
UBC	in-person
Grouse Mountain	in-person
Zoom	online
Vancouver Convention Centre	in-person

GroupMeetup(EventID: int, Name: char(80), Event_Date: date, **Location**: char(80), **GroupID**: int)

EVENTID	NAME	EVENT_DATE	LOCATION	GROUPID
<int>	<chr>	<chr>	<chr>	<int>
1301	Marathon Training!	01-MAR-23	Vancouver	1
1302	Petting Zoo	20-AUG-23	UBC	2
1303	Github Workshop	04-JAN-23	Zoom	4
1304	Intro to Java	03-MAR-23	Life Science Institute	4
1305	Volleyball Intramurals	03-MAR-23	War Memorial Gymnasium	1

GroupMeetup_Venues(delivery mode: char(80), Location: char(80))

LOCATION	DELIVERY_MODE
<chr>	<chr>
Vancouver	in-person
UBC	in-person
Zoom	online
Life Science Institute	in-person
War Memorial Gymnasium	in-person

RSVPCommunity(EventID: int, ProfileID: CHAR(80))

EVENTID	PROFILEID
---------	-----------

<int>	<dbl>
-------	-------

1201	1000
------	------

1201	1001
------	------

1202	1000
------	------

1202	1001
------	------

1202	1002
------	------

1203	1000
------	------

1203	1001
------	------

1203	1005
------	------

1204	1000
------	------

1204	1001
------	------

1205	1000
------	------

1205	1001
------	------

1206	1000
------	------

1206	1001
------	------

RSVPGroup(EventID: int, ProfileID: CHAR(80))

EVENTID	PROFILEID
---------	-----------

<int>	<dbl>
-------	-------

1301	1000
------	------

1301	1001
------	------

1302	1000
------	------

1302	1002
------	------

1302	1005
------	------

IsPartOf(CID: int, ProfileID: CHAR(80))

CID	PROFILEID
<int>	<dbl>
1001	1000
1001	1001
1001	1002
1001	1003
1002	1004
1002	1005

List of SQL Queries

INSERT

```
INSERT into Account(email, password) values (:bind1, :bind2)
INSERT into Profiles(userid, email, name, pronouns, faculty,
interest) values (:bind1, :bind2, :bind3, :bind4, :bind5, :bind6)
```

DELETE

```
DELETE FROM Account WHERE Email = '"' . $email . "'"
```

UPDATE

```
UPDATE Account SET Password='"' . $new_password . "'" WHERE Email='"' .
$email . "'"
```

SELECTION

```
SELECT $attributeInput FROM $tables WHERE $conditionInput
```

PROJECTION

```
SELECT " . implode(",", $cols) .
"FROM CommunityEvent
WHERE name like '%" . $inputEventName . "%'
```

JOIN

```
SELECT CommunityEvent.Name, CommunityEvent.event_Date,
CommunityEvent.Location
FROM (Community INNER JOIN CommunityEvent ON Community.CID =
CommunityEvent.CID)
WHERE Community.Name LIKE '%" . $inputJoin . "%'
```

AGGREGATION WITH GROUP BY

```
SELECT faculty, count(*)
FROM profiles
GROUP BY Faculty"
```

AGGREGATION WITH HAVING

```
SELECT CID
FROM ispartof
GROUP BY CID
HAVING count(*) > 1
```

NESTED AGGREGATION WITH GROUP BY

```
SELECT p.faculty, max(p.age)
FROM profiles p
GROUP BY faculty
HAVING max(p.age) > (SELECT avg(p1.age) FROM profiles p1)
```

DIVISION

```
SELECT userID
FROM profiles P
WHERE NOT EXISTS (SELECT EventID
                  FROM communityEvent
                  MINUS
                  SELECT EventID
                  FROM RSVPCommunity R
                  WHERE p.UserID = R.profileID)
```

Screenshots of Sample Output

INSERT - Account + Profile

- Before query:

Email	Password
chriswoojinlee@gmail.com	Woojin
trevordang@gmail.com	WakeUpEarly
ryangao@gmail.com	Lincoln#1
edwardchong@gmail.com	WhatIsBreakfast
alexwang@gmail.com	abcde
maddiezhang@gmail.com	12345

UserId	Name	Faculty	Pronouns	Interest	Email	GroupID
1000	Chris Woojin Lee	Science	he,him,his	Golf, Lasagna	chriswoojinlee@gmail.com	1
1001	Trevor Dang	Engineering	he,him,his	Golf, Lacrosse	trevordang@gmail.com	1
1002	Ryan Gao	Science	he,him,his	Badminton, School	ryangao@gmail.com	1
1003	Edward Chong	Science	he,him,his	Badminton, School	edwardchong@gmail.com	1
1004	Alex Wang	Forestry	they, them	Trees, Wood	alexwang@gmail.com	2
1005	Maddie Zhang	Arts	she, her, hers	Trees, Environment	maddiezhang@gmail.com	2

- After Query

Email	Password
michaelwong@hotmail.com	1234
chriswoojinlee@gmail.com	Woojin
trevordang@gmail.com	WakeUpEarly
ryangao@gmail.com	Lincoln#1
edwardchong@gmail.com	WhatIsBreakfast
alexwang@gmail.com	abcde
maddiezhang@gmail.com	12345

UserId	Name	Faculty	Pronouns	Interest	Email	GroupID
1007	Michael Wong	Arts	he, him, his	Basketball	michaelwong@hotmail.com	
1000	Chris Woojin Lee	Science	he,him,his	Golf, Lasagna	chriswoojinlee@gmail.com	1
1001	Trevor Dang	Engineering	he,him,his	Golf, Lacrosse	trevordang@gmail.com	1
1002	Ryan Gao	Science	he,him,his	Badminton, School	ryangao@gmail.com	1
1003	Edward Chong	Science	he,him,his	Badminton, School	edwardchong@gmail.com	1
1004	Alex Wang	Forestry	they, them	Trees, Wood	alexwang@gmail.com	2
1005	Maddie Zhang	Arts	she, her, hers	Trees, Environment	maddiezhang@gmail.com	2

INSERT - Posts

- Before query

UserID	Caption	Mood
1000	I applied to another job	Neutral
1001	I love ATSC	Happy
1002	I miss Lincoln	Sad
1003	320 is the best!	Excited
1004	I like hikes	Happy

- After query

UserID	Caption	Mood
1000	I wake up at 5am everyday.	Tired
1000	I applied to another job	Neutral
1001	I love ATSC	Happy
1002	I miss Lincoln	Sad
1003	320 is the best!	Excited
1004	I like hikes	Happy

DELETE

- Before query

Email	Password
chriswoojinlee@gmail.com	Woojin
trevordang@gmail.com	WakeUpEarly
ryangao@gmail.com	Lincoln#1
edwardchong@gmail.com	WhatIsBreakfast
alexwang@gmail.com	abcde
maddiezhong@gmail.com	12345

UserId	Name	Faculty	Pronouns	Interest	Email	GroupID
1000	Chris Woojin Lee	Science	he,him,his	Golf, Lasagna	chriswoojinlee@gmail.com	1
1001	Trevor Dang	Engineering	he,him,his	Golf, Lacrosse	trevordang@gmail.com	1
1002	Ryan Gao	Science	he,him,his	Badminton, School	ryangao@gmail.com	1
1003	Edward Chong	Science	he,him,his	Badminton, School	edwardchong@gmail.com	1
1004	Alex Wang	Forestry	they, them	Trees, Wood	alexwang@gmail.com	2
1005	Maddie Zhang	Arts	she, her, hers	Trees, Environment	maddiezhong@gmail.com	2

- After query

Email	Password
chriswoojinlee@gmail.com	Woojin
ryangao@gmail.com	Lincoln#1
edwardchong@gmail.com	WhatIsBreakfast
alexwang@gmail.com	abcde
maddiezhang@gmail.com	12345

UserID	Name	Faculty	Pronouns	Interest	Email	GroupID
1000	Chris Woojin Lee	Science	he,him,his	Golf, Lasagna	chriswoojinlee@gmail.com	1
1002	Ryan Gao	Science	he,him,his	Badminton, School	ryangao@gmail.com	1
1003	Edward Chong	Science	he,him,his	Badminton, School	edwardchong@gmail.com	1
1004	Alex Wang	Forestry	they, them	Trees, Wood	alexwang@gmail.com	2
1005	Maddie Zhang	Arts	she, her, hers	Trees, Environment	maddiezhang@gmail.com	2

UPDATE

- Before query

Email	Password
chriswoojinlee@gmail.com	Woojin
ryangao@gmail.com	Lincoln#1
edwardchong@gmail.com	WhatIsBreakfast
alexwang@gmail.com	abcde
maddiezhang@gmail.com	12345

- After query

Email	Password
chriswoojinlee@gmail.com	Woojin
ryangao@gmail.com	Lincoln#1
edwardchong@gmail.com	WhatIsBreakfast
alexwang@gmail.com	password
maddiezhang@gmail.com	12345

SELECTION

- Before query

UserID	Name	Faculty	Pronouns	Interest	Email	GroupID
1000	Chris Woojin Lee	Science	he,him,his	Golf, Lasagna	chriswoojinlee@gmail.com	1
1002	Ryan Gao	Science	he,him,his	Badminton, School	ryangao@gmail.com	1
1003	Edward Chong	Science	he,him,his	Badminton, School	edwardchong@gmail.com	1
1004	Alex Wang	Forestry	they, them	Trees, Wood	alexwang@gmail.com	2
1005	Maddie Zhang	Arts	she, her, hers	Trees, Environment	maddiezhang@gmail.com	2

- After query (Profile: UserID > 1003)

UserID	Name	Faculty	Pronouns	Interest	Email	GroupID
1004	Alex Wang	Forestry	they, them	Trees, Wood	alexwang@gmail.com	2
1005	Maddie Zhang	Arts	she, her, hers	Trees, Environment	maddiezhang@gmail.com	2

PROJECTION

- Before query

Name	Event_Date	Location
Christmas Social	31-OCT-23	Vancouver Convention Centre
Grouse Grind!	05-MAY-23	Grouse Mountain
Halloween Social	31-OCT-23	UBC
Marathon Sunday!	03-MAR-23	Vancouver
Pilates with Bunnies	04-APR-23	UBC
nwHacks Hackathon	14-JAN-23	UBC

- After query (Event Name: Social) all attributes selected

Name	Event_Date	Location
Christmas Social	31-OCT-23	Vancouver Convention Centre
Halloween Social	31-OCT-23	UBC

JOIN

- Before query

Name	Event Date	Location
Marathon Sunday!	03-MAR-23	Vancouver
Pilates with Bunnies	04-APR-23	UBC
Grouse Grind!	05-MAY-23	Grouse Mountain
nwHacks Hackathon	14-JAN-23	UBC
Halloween Social	31-OCT-23	Zoom
Christmas Social	31-OCT-23	Vancouver Convention Centre

- After query (Community: Artsy)

Name	Event Date	Location
Pilates with Bunnies	04-APR-23	UBC
Halloween Social	31-OCT-23	Zoom

AGGREGATION WITH GROUP BY

Retrieved data from Networking Application:

Faculty	Count
Engineering	1
Forestry	1
Science	3
Arts	1

AGGREGATION WITH HAVING

Retrieved data from Networking Application:

CID
1001
1002

NESTED AGGREGATION WITH GROUP BY

Retrieved data from Networking Application:

Faculty	Age
Engineering	20
Science	20

DIVISION

Retrieved data from Networking Application:

UserID
1000
1001