Group 1

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IS 6420 – Database Theory And Design

Contents

Executive Summary

This project includes a conceptual, logical and physical model for the social media company Tinder as well as documenting its business summary. This project explains the products and services that Tinder offers and goes into detail the transactional relationship between Tinder and its customers.

We break down how the minds behind Tinder came up with the idea as well as how it got its introduction into the dating business. We go into detail what made Tinder different from the other dating websites at the time and how the creators had to try a different tactic when the company first initially did not take off.

We go into specific detail the different types of subscriptions the company has to offer, and the different features that go into them. All of the subscriptions have different price ranges depending on how many months/years you buy. We explain how Tinder not only has a subscription service, but also single time purchases that have a totally separate transaction process. We also found out that Tinder has a different type of payment plans for different types of ages, showing exactly who Tinder's target audience is. Tinder may seem like just a dating service but if you take a deeper look you see the huge business conglomerate it truly is.

We downloaded the Tinder app and went through the process it took to create an account. We were able to identify the different types of subscriptions and features that they each had to offer. This helped us know exactly what the app was trying to sell and we were able to see the transaction process from a first hand point of view.

General Description

Introduction and History

Tinder was founded back in September of 2012 by Sean Rad, Justin Mateen, Jonathan Badeen, Joe Munoz, Dinesh Moorjani, and Whitney Wolfe. The idea came to the group while they were attending college at University of Southern California. The group realized that there was a demographic not being reach on their local campus in terms of socializing. Specifically, they noticed that when it came to stepping into the dating world, a large group of people had difficulty initiating or engaging in conversation face to face. As a result, the group began to create an app that was similar to a popular app during the time called Hot or Not. They implemented the swiping feature, which allowed users to swipe right if they liked someone, or swipe left if they were uninterested.

Tinder did not initially take off when it was first launched. However, the app began to gain a lot of traction amongst college students after the group sent out a Tinder link to all the contacts in their phone to try and gain some marketing exposure. This tactic worked, and word spread like wildfire. Soon Tinder's demographic had grown from

mainly eighteen- to twenty-four-year-olds, to having half of their users being in the college demographic. The focus the creators of Tinder kept in mind when creating the application was to simulate a game that you never wanted to put down. Even though Tinder's demographic is primarily catering towards those that are looking to date and get matched with other users, there is now a significantly large demographic of Tinder users that have the application just for fun. These users are not necessarily looking to Tinder to date, but to have a unique experience.

Tinder joined the social media fad in 2012 and took over the dating world by storm. Being able to "like" or "dislike" someone based on their appearance and a short description of themself with just a swipe of your finger was a new social interaction that no one had ever seen before. That phenomenon of swiping probably explains the massive success Tinder found even in its early days. As of today, Tinder has over 130 billion users logging on every day.

Vision

Tinder's Mission statement is, "Tinder makes being single more fun and rewarding by connecting people who may not have otherwise met in real life. We celebrate that being single is a journey. And a great one. Being single isn't the thing you do unhappily before settling down. We stand up for how a whole generation chooses to live their lives." Also, in 2019 Tinder's Executive Representative for Media Management and Platform Engagement stated that Tinder's aim is to help millennials find their true love while they are still in their 20's. These two statements explain exactly who Tinder's target audience is, single millennials.

Products & Services

When first signing up for Tinder you are offered four different types of profiles to sign up for, these include the basic free profile, Tinder Plus, Tinder Gold and Tinder Platinum. Tinder plus, gold and platinum are a monthly subscription fee that all differ in how much they cost. A free profile allows you the basic features for Tinder which include a limited number of swipes and one top pick per day.

The first subscription profile is Tinder Plus. Tinder plus offers unlimited likes; you can control your age and distance as well as being able to hide information from other tinder profiles. Tinder plus also offers the option to only allow profiles that you have liked to view your profile. It also lets you swipe with profiles around the world, it has unlimited rewinds, and there are no ads on the app whatsoever. Tinder gold offers the same features as tinder plus while also including the following features. You can instantly match with other profiles that have already liked you. You get full access to all the top picks every single day. Tinder gold also comes with one boost a month and five super likes per week. Lastly, and the most expensive subscription is Tinder Platinum. Tinder Platinum comes with all the features from Tinder Plus and Gold but also has two features of its own. Those features are being able to send a message with every super like and being on the prioritized like list. Having four different

profiles ranging in price allows customers to sample it for free and then purchase a subscription if they enjoyed the free trial and want more features.

Transactions within Tinder

Besides the subscriptions that come with Tinder Plus, Gold and Platinum Tinder also offer one time purchases for profiles. The singular purchases available on the app include packages of 3,12 and 50 super likes. Ranging from either $3.33 each, $2.50 each and $1.50 each with the better deal coming with the higher purchase. Another feature that is available for singular purchase is “skip the line.” Which allows the customer to be a top profile in the area for 30 minutes. Much like the super likes the boosts come in packages with the most expensive package coming with the most boosts at a cheaper price per boost. These subscriptions and packages are very easy to find because tinder plasters their app with them if you haven’t already bought a subscription from them.

Prioritized Requirements

Due to the large scale Tinder is able to offer through its vast interconnected network, we decided to mainly focus on Tinder’s primary consumer uses. Expanding beyond the initial scope to include something analyzing the depths of Tinder’s matchmaking programming and such would have been a bit much given the timeframe of the project. As a result, we focused on these requirements:

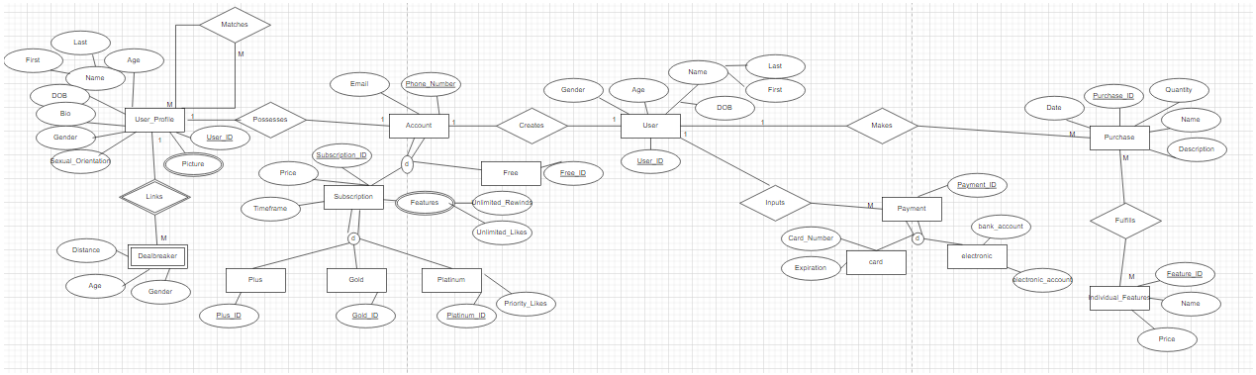
- Users must be able to create an account
- Users must be able to link a user profile to their account
- Users must be able to choose which account type they want
- Users must be able to purchase individual features for their account

To meet these requirements, we went through and studied the process of signing up for a Tinder account, and the necessary information needed to have the account and user profile up and running. In addition to having the account running, we also needed to make sure that the user could switch their account type at any time, as well as make any purchases that they would like. After going through the sign-up process, and analyzing the costs of the various features and subscriptions, we were able to nail-down our model to 12 tables:

- User
- Purchase
- Individual_Features
- Payment
- Account
- Subscription
- Free
- Plus
- Gold
- Platinum
- User_Profile
- Dealbreaker

Conceptual Model

Conceptual Model



Conceptual Model Description

The diagram displayed above is our conceptual model. In the very center of our conceptual model is the user entity due to the user being the instigator of all the other entities. Without the user, none of the other tables or entities would exist, which is why the user entity is the central entity of the entire conceptual model.

One of the main relationships we have displayed in our conceptual model is the supertype subtype relationship. It was key that we implemented this relationship into our conceptual model due to the various account, subscription, and payment types Tinder has to offer.

Tinder's account types can be broken down into two basic entities: free or subscription. With every subscription account Tinder offers various pricing dependent on the account holder's age and timeframe of the subscription status. However, the supertype subtype relationship from the account entity can be broken down even further because of the different levels of subscriptions Tinder offers. With each subscription plan comes different features and benefits that will can carry over to certain subscriptions. For example, a Tinder plus subscription will not have the same features as a Gold or platinum subscription. However, a gold subscription account will have more benefits and features in addition to those that are included in the plus subscription.

The second instance of implementing a supertype subtype relationship is seen with the payment entity. Due to various forms of electronic payment now becoming widely used, such as Paypal or Venmo, it was important that we include these two forms of payment methods in our conceptual model. While a normal card payment method requires only the card number and the expiration date, the electronic payment method only requires the user to have access to their bank account number and an electronic payment account.

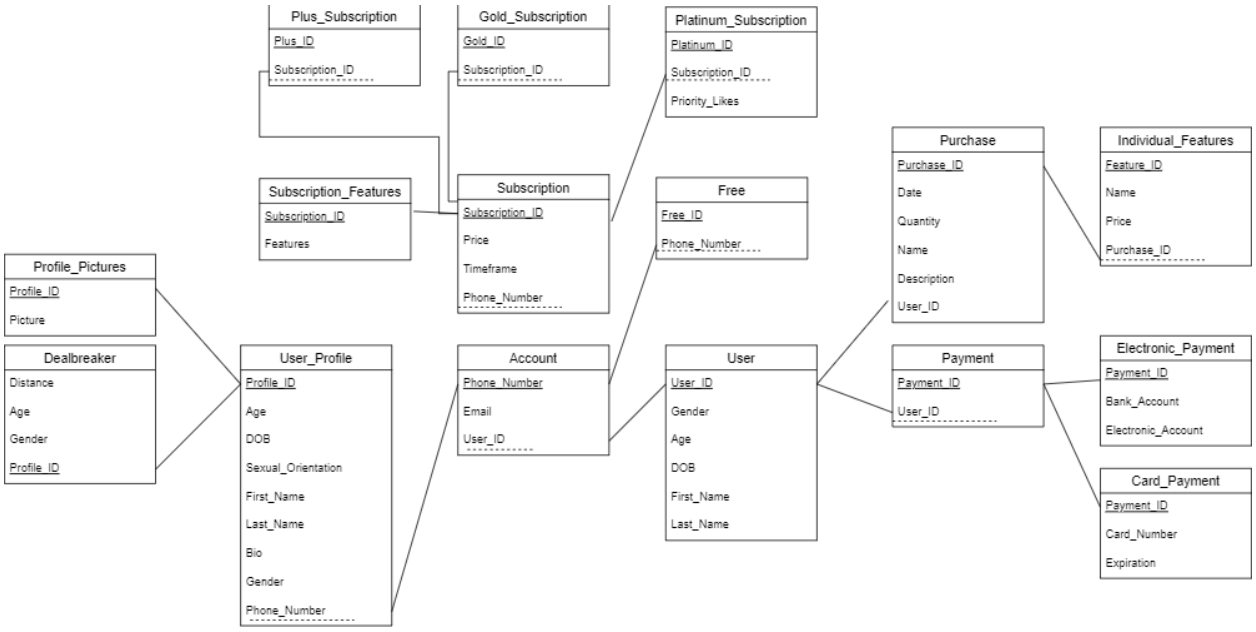
In addition to our supertype subtype relationships, we also implanted a weak entity relationship between the user profile and dealbreaker entities. Tinder allows every user to enter stipulations regarding their profile. These stipulations focus on what the

user does not want in their potential matches, specifically regarding the other user's age and distance. These stipulations are stored in a section of the profile called the dealbreaker. However, the dealbreaker cannot exist without having an account linked to it. This means that the dealbreaker is dependent on the existence of the user profile.

The last unique feature we included in our conceptual model is the user of multi-valued attributes with the user profile pictures and the subscription account features. Tinder allows the user to upload several photos to their account that will be displayed to the other user when deciding whether to swipe left or right. In addition to having multiple photos, a subscription account holder will have access to several quantities of features, specifically rewinds and likes. These features can be used by the subscription holder to let a potential match know that they are interested in them.

Logical Model

Logical Model



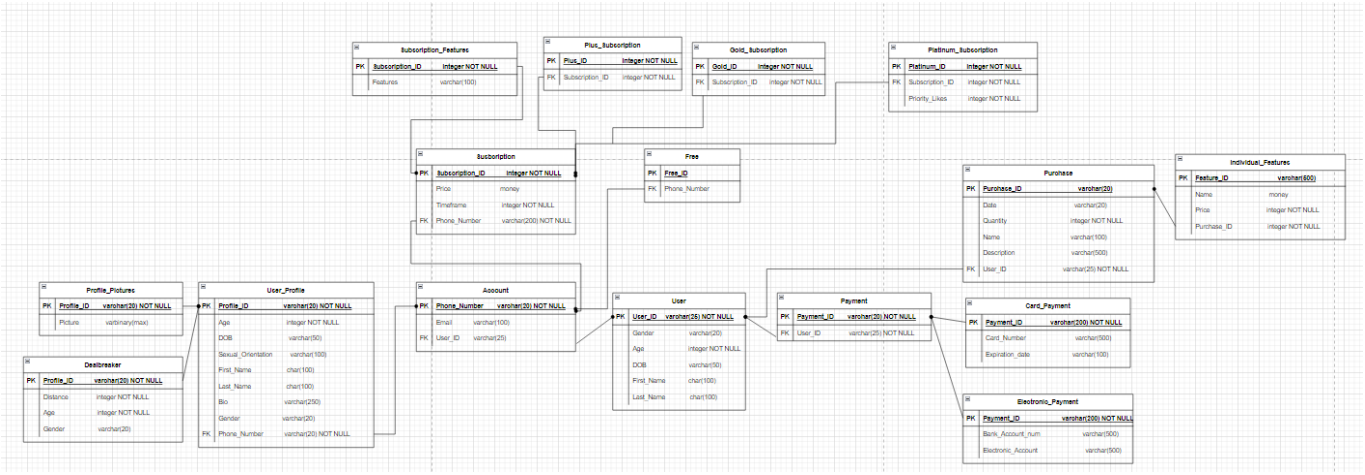
Logical Model Description

The diagram displayed above is our logical model. Our logical model presents a pretty clear image of how all of our tables are interconnected to one another through various foreign keys. Just like in the conceptual model, the user table is in the center of the diagram because they are the instigator for every action. However, despite the user table being the center of everything in the diagram, it is the user profile table that stores the most information. This is due to the fact that the user profile must convey an accurate image of what the user is like towards others so that they may potentially be matched. While having enough information is important, possessing too much information can make the users less inclined to thoroughly view their potential match's

profile. As a result, Tinder made sure that every user profile would possess basic information, such as age, gender, sexual orientation, etc., but also a brief little bio to learn more about a user's hobbies or interests.

Physical Model

Physical Model



Physical Model Description

Overall, when it came down to figuring out how Tinder worked as an application overall, we all decided to conduct a little research. Some of us viewed Tinder through their mobile app, while the others tried using their website to see if there were any key differences feature wise that may or may not be included in certain versions. Overall, the ease of use and feature availability was equally matched on both the website and the application.

From there we dived deeper into the account creation process. When starting off, we all had a basic understanding of how Tinder worked and some of the overall features that are included in a Tinder account. However, it came as a surprise to all of us to see how many extra features Tinder included in their application through subscription services or external feature purchases. We wanted to make sure that when creating all our models, that we were as accurate as possible, even though we would not be able to include every single feature Tinder has to offer.

After carefully researching the sign-up process, and the necessary information the user would need to create an account, and also complete a user profile, we then conducted more studies on Tinder's subscription business model. It was here that we discovered that Tinder not only offered several subscription plans, but they also offered payment plans that were priced based on the user's age. Tinder separates its users into two categories based on their age: over 30 and under 30. Generally, when looking at the payment plans for all the subscription types, we found that those who

fell into the under 30 demographic, were paying less for every single payment plan, regardless of the subscription that they chose. We believe that this is because of Tinder's primary focus on catering towards a younger demographic, primarily in a college setting, just like when they first launched.

Description of Sample Data

Our sample data was randomly generated using our own creativity or a random generator. The use of a random number generator was helpful when it came to inputting the various types of primary and foreign keys into the table. It allowed us to implement a significant range of values when it came to determining what integers would be used to indicate primary and foreign keys. All of the names, phone numbers, emails, and payment information were also randomly created and implemented into the database.

Please refer to our appendix to see the data inside of our SQL database.

Current and Future Features

Currently Functional:

Tinder has dozens of features but which ones you get access to depends on what subscription you choose. The basic features of the free Tinder profile are: a limited number of swipes a day, one top pick of the day, messaging other profiles that you have matched with and being able to check notifications. Tinder Plus features all the same as the free Tinder profile but with a few additional features. Tinder Plus offers an unlimited number of swipes, you are able to limit the distance and age of the profiles you are swiping, you can choose who sees your profile, you can like profiles around the world with the passport feature, you have unlimited rewinds and no ads on the app whatsoever. Tinder Gold includes all the features of Free and Plus but also has some features of its own. Tinder Gold allows the user 5 super likes that they can use per day, they also get one tinder boost per month. The boost prioritizes your profile to the front of the list when other profiles start swiping. The last profile and most expensive is Tinder Platinum. Tinder Platinum offers all of the features the other subscriptions provide as well as some of its own. With Tinder Platinum you are able to message profiles before even matching with them, you are also always on the prioritized like list, meaning everyone will see your likes sooner.

Besides the subscriptions, Tinder offers single purchase features as well. If someone doesn't want to have Tinder take money out of their account every month they can buy super likes or profile boosts for purchase. User's are able to buy packages of 3,12 and 50 super likes, saving more money with the higher purchase. Same goes for the singular purchase boosts. The boosts come in packages of 1,5, or 10 with the package of 10 boosts being $6 each while a singular boost is $8 each.

Future Features:

A feature that Tinder wants to implement in the app soon has to do with safety. In Tinder's past they have had problems with safety and reports of assault when meeting up with some profiles. One way Tinder is combating that is by allowing users to run background checks on people they have matched with. With this feature people will know exactly who they are in contact with and they will feel more safe and secure when meeting up with other people.

Requirements

Overall, based on our prioritized requirements our model of Tinder has successfully fulfilled all of the primary requirements to have a functional application. While our model represents a basic skeleton of what the Tinder application is capable of, its overall functionality is prominent and is capable of performing the primary functions of the original Tinder application.

What Is Missing?

One idea we wanted to try and include in our model, but overall felt it best to eliminate from our project scope, is the implementation of Tinder's swipe nights. Tinder swipe night provides users with an interactive experience through the application that allows account holders to make individual choices in a story based visual. Users only have seven seconds to make a choice that can change the overall outcome of the story.

This concept of an interactive story expands on the founders idea of Tinder being a game that you do not want to put down. However, with the swipe night only happening one month out of the year there is little information regarding the specific details of the event for those who have not participated in a swipe night previously. Swipe nights are generally marketed by sending post notifications to Tinder account users when the swipe night event is about to begin. This limits not only the amount of traffic Tinder can get to only account holders, but also there is no actual system in place that would allow users to make a reservation or confirm that they are participating in the swipe night.

Due to the layout of how a swipe night is hosted, we would have to make some changes to our model to include how a swipe night is hosted. These changes would mainly include the overall process of creating the interactive experience and the system used to inform Tinder users about the swipe night. Overall, the concept of the swipe night was interesting and unique, but was too broad of a topic to try and include in our current model focus.

Conclusion and Next Steps

Next Steps

One direction that Tinder could take in the future is focusing more on the Passport Feature. The Passport feature comes with Tinder Plus, Gold and Platinum. This feature allows profiles to expand their distance preferences to max which allows them to match with people all around the world. This feature is very interesting because it allows people to meet and connect with people that they otherwise would not be able to. This feature is not being used to its full advantage.

One feature that we brought up is called the Tinder Date Package. With the Tinder Date Package two profiles that have felt a connection and want to take that next step can purchase a Tinder Package Date. There could be multiple packages at different prices, but the basic features would be a ride that picks both members up using either Lyft or Uber. Then, depending on the package that was purchased they are taken to a restaurant with a specific menu for the Tinder Date Package. At the end of the date the two members would be driven home with the same company that picked them up.

This would be the same business structure as Group-On. Because Tinder would be buying massive amounts of these packages from Uber/Lyft and different types of restaurants, Tinder would be able to get them at a discount. Safety would also be a number one priority. Due to the drivers and restaurants knowing that these Tinder Package Dates are first dates, they can be more aware and on the lookout for any suspicious behavior.

Conclusion

Tinder was a big player in breaking the stereotypical image of what dating could look like. They saw that there was a need for a platform for those who had trouble making the first step in dating, which is: communication. With mobile device usage on the rise, they saw an opportunity to expand the dating realm, and succeeded. As a result, many other companies have come forward and created their own type of dating app with its own unique idea or key defining feature. Despite now having to compete in a relatively saturated market of mobile dating applications, everyone on Team 1 believes that Tinder will continue to grow as a company and develop more new ways to make connecting with your future love easier. Tinder has already shown that, despite the new competition, they are not stopping in trying to come up with new and innovative features. If anything, we believe that the general use of mobile dating applications will increase due to the social distancing most of the world had to experience for the past two to three years due to Covid 19. As a result, more people are wanting to connect and become social after coming out of a pandemic.

SQL Statements

```
------------------------------User----------------
drop table if exists users;
CREATE TABLE users (user_id varchar(25) not null,
 age integer not null,
 gender varchar(20),
 date_of_birth varchar(50),
 first_name CHAR (100),
 last_name CHAR (100),
PRIMARY KEY (user_id)
);

-----------------------------------------Account-----------------------------------
drop table if exists account;
create table account ( phone_number varchar(20) not null,
email_id varchar(100),
user_id varchar(25),
primary key(phone_number),
CONSTRAINT order_fkey_user_id FOREIGN KEY (user_id) REFERENCES users
(user_id)
);
--------------------------------User_Profile--------------------
DROP TABLE IF EXISTS user_profile ;
CREATE TABLE user_profile ( profile_id varchar(20) NOT NULL,
 age integer not null,
 date_of_birth varchar (50),
 sexual_orientation VARCHAR (100),
 first_name CHAR (100),
 last_name CHAR (100),
 bio VARCHAR (250),
 gender varchar(20),
 phone_number varchar(20) not null,
PRIMARY KEY (profile_id,phone_number),
CONSTRAINT order_fkey_phone_number FOREIGN KEY (phone_number)
REFERENCES account (phone_number)
) ;

------------------purchase-------------
drop table if exists purchase;
create table purchase(purchase_id integer not null,
purchase_date varchar(20),
quantity integer not null,
plan_name varchar(100),
description varchar(500),
user_id varchar(25),
```

```
primary key(purchase_id),
CONSTRAINT order_fkey_user_id FOREIGN KEY (user_id) REFERENCES users
(user_id));
----------individual_features----------
drop table if exists individual_features;
create table individual_features( feature_id varchar(20) not null,
feature_name varchar(500),
price money,
purchase_id integer not null,
primary key (feature_id,purchase_id),
CONSTRAINT order_fkey_purchase_id FOREIGN KEY (purchase_id) REFERENCES
purchase (purchase_id));

----------payment----------
drop table if exists payment;
create table payment(payment_id varchar(20) not null,
user_id varchar(25),
primary key(payment_id,user_id),
CONSTRAINT order_fkey_user_id FOREIGN KEY (user_id) REFERENCES users
(user_id)
);

---------- electronic_payment----
drop table if exists electronic_payment;
create table electronic_payment(payment_id varchar(200) not null,
bank_account_num varchar(500),
amount money
);
----------card_payment----------
drop table if exists card_payment;
create table card_payment( payment_id varchar(200) not null,
card_num varchar(500),
expiration_date varchar(100),
amount money
);
----------subscription----------
drop table if exists subscribe;
create table subscribe( subscription_id integer not null,
price money,
time_frame_in_months integer not null,
user_id varchar(25) ,
phone_number varchar(200) not null,
primary key(subscription_id,user_id),
CONSTRAINT order_fkey_user_id FOREIGN KEY (user_id) REFERENCES users
(user_id)
```

```
);
----------------------subscription_features--
drop table if exists subscription_features;
create table subscription_features(subscription_id integer not null,
features varchar(100)
);
-----------------plus_subscription-----------
drop table if exists plus_subscrption;
create table plus_subscrption(subscription_id integer not null,
plus_id integer not null
);
----------------gold_subscription----------
drop table if exists gold_subscrption;
create table gold_subscrption(subscription_id integer not null,
gold_id integer not null
);
--------------platinum_subscription----------------
drop table if exists platinum_subscrption;
create table platinum_subscrption(subscription_id integer not null,
platinum_id integer not null,
priority_likes integer not null
);
```

Insert Statements

```
INSERT INTO users  values ('anna',20,'F','11/08/1994','anna','morrison');

INSERT INTO users  values
('jasmine',22,'M','11/09/1996','jasmine','phillips');

INSERT INTO users  values ('henry',24,'M','09/10/1990','henry','gibson');

INSERT INTO users  values ('emma',30,'M','11/11/1994','emma','howard');

INSERT INTO users  values ('reid',19,'F','11/12/1994','reid','thompson');

INSERT INTO users  values ('haris',34,'M','11/13/1994','haris','warren');

INSERT INTO users  values ('honey',22,'M','11/14/1994','honey','russell');

INSERT INTO users  values ('mary',21,'F','11/15/1994','mary','morrison');

INSERT INTO users  values ('paige',28,'F','11/16/1994','paige','hamilton');

INSERT INTO users  values
('kimberly',27,'F','11/17/1994','kimberly','richards');

INSERT INTO users  values ('aida',19,'F','12/18/1994','aida','walker');

INSERT INTO users  values ('savana',18,'M','11/19/1994','savana','clark');

INSERT INTO users  values ('carina',40,'M','10/20/1994','carina','reed');

INSERT INTO users  values
('michelle',32,'M','11/21/1994','michelle','parker');

INSERT INTO users  values ('arthur',23,'F','11/22/1994','arthur','myers');

INSERT INTO users  values ('sophia',22,'F','01/23/1994','sophia','owens');

INSERT INTO users  values ('lucas',29,'M','11/24/1994','lucas','grant');

INSERT INTO users  values ('ada',28,'M','11/25/1994','ada','fowler');

INSERT INTO users  values ('fiona',25,'M','11/26/1994','fiona','elliott');
```

```
INSERT INTO account  values
(7754570808,'anna.morrison@hotmail.com','anna');

INSERT INTO account  values
(3081577003,'jasmine.phillips@aol.com','jasmine');

INSERT INTO account  values
(6484332921,'henry.gibson@outlook.com','henry');

INSERT INTO account  values
(9732898776,'emma.howard@gmail.com','emma');

INSERT INTO account  values
(7690257623,'reid.thompson@hotmail.com','reid');

INSERT INTO account  values
(2127787993,'haris.warren@hotmail.com','haris');

INSERT INTO account  values
(7846938061,'honey.russell@hotmail.com','honey');

INSERT INTO account  values
(1414608738,'mary.morrison@outlook.com','mary');

INSERT INTO account  values
(1627714224,'paige.hamilton@hotmail.com','paige');

INSERT INTO account  values
(6322814700,'kimberly.richards@aol.com','kimberly');

INSERT INTO account  values
(4774272568,'aida.walker@gmail.com','aida');

INSERT INTO account  values
(3477082169,'savana.clark@gmail.com','savana');

INSERT INTO account  values (6689953241,'carina.reed@aol.com','carina');

INSERT INTO account  values
(9783464344,'michelle.parker@aol.com','michelle');
```

```
INSERT INTO account  values
(1546019621,'arthur.myers@outlook.com','arthur');

INSERT INTO account  values
(6451996252,'sophia.owens@gmail.com','sophia');

INSERT INTO account  values (9822669366,'lucas.grant@aol.com','lucas');

INSERT INTO account  values (4438452733,'ada.fowler@aol.com','ada');

INSERT INTO account  values (1693007751,'fiona.elliott@aol.com','fiona');
```

```
INSERT INTO user_profile  values
(100,20,'11/08/1994','Straight','anna','morrison','Pros and cons of dating
me: Pro, you won't be single. Con: You'll be dating me','F',7754570808);

INSERT INTO user_profile  values
(101,22,'11/09/1996','Gay','jasmine','phillips','Just looking for something
super casual, like marriage and children. Nothing
serious!','M',3081577003);

INSERT INTO user_profile  values
(102,24,'09/10/1990','Gay','henry','gibson','Two thruths','M',6484332921);

INSERT INTO user_profile  values
(103,30,'11/11/1994','Bisexual','emma','howard','

I'm vaxxed and waxed. Do what you will with that
information.','M',9732898776);

INSERT INTO user_profile  values
(104,19,'11/12/1994','Asexual','reid','thompson','If you're looking for
someone with a personality, you're in luck! I have
multiple.','F',7690257623);

INSERT INTO user_profile  values
(105,34,'11/13/1994','Straight','haris','warren','
```

```
Not picky about how tall you are, because everyone is the same height in bed.','M',2127787993);

INSERT INTO user_profile  values
(106,22,'11/14/1994','Lesbian','honey','russell','My dog's name is Remi, and he's looking for a father… I, however, am looking for a daddy.','M',7846938061);

INSERT INTO user_profile  values
(107,21,'11/15/1994','Lesbian','mary','morrison','

If you had to listen to one song for the rest of your life, what would it be?','F',1414608738);

INSERT INTO user_profile  values
(108,28,'11/16/1994','Bisexual','paige','hamilton','Give me your best pickup line.','F',1627714224);

INSERT INTO user_profile  values
(109,27,'11/17/1994','Asexual','kimberly','richards','My most unpopular opinion is that Disney is overrated. What's yours?','F',6322814700);

INSERT INTO user_profile  values
(110,19,'12/18/1994','Straight','aida','walker','

I need someone to fill in for Timbaland's half of the "Promiscuous" duet with Nelly Furtado. Trying to sing both by myself is getting really exhausting.','F',4774272568);

INSERT INTO user_profile  values
(111,18,'11/19/1994','Gay','savana','clark','

Looking for the pepperoni to my pizza, the peanut butter to my jelly, the cheese to my crackers. Oh dang… now I'm hungry.','M',3477082169);

INSERT INTO user_profile  values
(112,40,'10/20/1994','Gay','carina','reed','

I may not be the best cook, but I know how to whip up a great order with Uber Eats. Satisfaction guaranteed.','M',6689953241);
```

```
INSERT INTO user_profile  values
(113,32,'11/21/1994','Bisexual','michelle','parker','Now taking applications for a boyfriend. Must be certified in cuddling and telling me I’m pretty. Swipe right to inquire within.','M',9783464344);

INSERT INTO user_profile  values
(114,23,'11/22/1994','Asexual','arthur','myers','

I need someone to fill in for Timbaland’s half of the “Promiscuous” duet with Nelly Furtado. Trying to sing both by myself is getting really exhausting.','F',1546019621);

INSERT INTO user_profile  values
(115,22,'01/23/1994','Straight','sophia','owens','

Looking for the pepperoni to my pizza, the peanut butter to my jelly, the cheese to my crackers. Oh dang… now I’m hungry.','F',6451996252);

INSERT INTO user_profile  values
(116,29,'11/24/1994','Gay','lucas','grant','

I may not be the best cook, but I know how to whip up a great order with Uber Eats. Satisfaction guaranteed.','M',9822669366);

INSERT INTO user_profile  values
(117,28,'11/25/1994','Gay','ada','fowler','Now taking applications for a boyfriend. Must be certified in cuddling and telling me I’m pretty. Swipe right to inquire within.','M',4438452733);

INSERT INTO user_profile  values
(118,25,'11/26/1994','Bisexual','fiona','elliott','

I’m vaxxed and waxed. Do what you will with that information.','M',1693007751);
```

```
INSERT INTO purchase  values (1235,'11/09/2020',3,'Plus','Unlimited likes, Choose who sees you, Unlimited rewinds, Turn Off Ads, Control your age & distance, Like profiles around the world','jasmine');

INSERT INTO purchase  values (1236,'11/10/2020',12,'Plus','Unlimited likes, Choose who sees you, Unlimited rewinds, Turn Off Ads, Control your age & distance, Like profiles around the world','henry');

INSERT INTO purchase  values (1237,'08/17/2020',6,'Gold','Unlimited likes, 1 Free Boost A Month, 5 Free Super likes a week, Turn Off Ads','emma');

INSERT INTO purchase  values (1238,'05/16/2020',6,'Gold','Unlimited likes, 1 Free Boost A Month, 5 Free Super likes a week, Turn Off Ads','reid');

INSERT INTO purchase  values (1239,'11/07/2020',12,'Platinum','Message before matching, Prioritized likes,See who likes you, 1 boost a month','haris');

INSERT INTO purchase  values (1240,'01/28/2021',12,'Platinum','Message before matching, Prioritized likes,See who likes you, 1 boost a month','honey');

INSERT INTO purchase  values (1241,'11/24/2020',12,'Platinum','Message before matching, Prioritized likes,See who likes you, 1 boost a month','mary');

INSERT INTO purchase  values (1242,'04/13/2020',12,'Plus','Unlimited likes, Choose who sees you, Unlimited rewinds, Turn Off Ads, Control your age & distance, Like profiles around the world','paige');

INSERT INTO purchase  values (1243,'09/18/2020',6,'Gold','Unlimited likes, 1 Free Boost A Month, 5 Free Super likes a week, Turn Off Ads','kimberly');

INSERT INTO purchase  values (1244,'07/29/2020',6,'Gold','Unlimited likes, 1 Free Boost A Month, 5 Free Super likes a week, Turn Off Ads','aida');
```

```
INSERT INTO individual_features  values (123,'Unlimited likes, Unlimited rewinds, Passport','7.99',1236);

INSERT INTO individual_features  values (124,'Unlimited likes, Unlimited rewinds, Passport','7.99',1237);

INSERT INTO individual_features  values (125,'Unlimited likes, See who likes you, Unlimited rewards, 1 Free Boost per month, 5 Super likes per week, Passport','24.99',1238);

INSERT INTO individual_features  values (126,'Unlimited likes, See who likes you, Unlimited rewards, 1 Free Boost per month, 5 Super likes per week, Passport','24.99',1239);

INSERT INTO individual_features  values (127,'Unlimited likes, See who likes you, Priority likes, Unlimited rewards, 1 Free Boost per month, 5 Super likes per week, Passport','29.99',1240);

INSERT INTO individual_features  values (128,'Unlimited likes, See who likes you, Priority likes, Unlimited rewards, 1 Free Boost per month, 5 Super likes per week, Passport','29.99',1241);

INSERT INTO individual_features  values (129,'Unlimited likes, See who likes you, Priority likes, Unlimited rewards, 1 Free Boost per month, 5 Super likes per week, Passport','29.99',1242);

INSERT INTO individual_features  values (130,'Unlimited likes, Unlimited rewinds, Passport','7.99',1243);

INSERT INTO individual_features  values (131,'Unlimited likes, See who likes you, Unlimited rewards, 1 Free Boost per month, 5 Super likes per week, Passport','24.99',1244);



INSERT INTO payment  values (102985678,'anna');

INSERT INTO payment  values (102985679,'jasmine');
```

```
INSERT INTO payment  values (102985680,'henry');
INSERT INTO payment  values (102985681,'emma');
INSERT INTO payment  values (102985682,'reid');
INSERT INTO payment  values (102985683,'haris');
INSERT INTO payment  values (102985684,'honey');
INSERT INTO payment  values (102985685,'mary');
INSERT INTO payment  values (102985686,'paige');
INSERT INTO payment  values (102985687,'kimberly');
INSERT INTO payment  values (102985688,'aida');
INSERT INTO payment  values (102985689,'savana');
INSERT INTO payment  values (102985690,'carina');
INSERT INTO payment  values (102985691,'michelle');
INSERT INTO payment  values (102985692,'arthur');
INSERT INTO payment  values (102985693,'sophia');
INSERT INTO payment  values (102985694,'lucas');
INSERT INTO payment  values (102985695,'ada');
INSERT INTO payment  values (102985696,'fiona');
```

```
INSERT INTO electronic_payment  values (102985678,2244559933,'24.99');
INSERT INTO electronic_payment  values (102985679,2244559934,'7.99');
INSERT INTO electronic_payment  values (102985680,2244559935,'7.99');
```

```
INSERT INTO electronic_payment  values (102985681,2244559936,'24.99');

INSERT INTO electronic_payment  values (102985682,2244559937,'24.99');

INSERT INTO electronic_payment  values (102985683,2244559938,'29.99');

INSERT INTO electronic_payment  values (102985684,2244559939,'29.99');

INSERT INTO electronic_payment  values (102985685,2244559940,'29.99');

INSERT INTO electronic_payment  values (102985686,2244559941,'7.99');

INSERT INTO electronic_payment  values (102985687,2244559942,'24.99');

INSERT INTO electronic_payment  values (102985688,2244559943,'24.99');
```

```
INSERT INTO card_payment  values
(102985689,412356780934,'04/21/2024','24.99');

INSERT INTO card_payment  values
(102985690,412356780935,'04/22/2024','7.99');

INSERT INTO card_payment  values
(102985691,412356780936,'04/23/2026','7.99');

INSERT INTO card_payment  values
(102985692,412356780937,'04/24/2024','24.99');

INSERT INTO card_payment  values
(102985693,412356780938,'04/25/2022','24.99');

INSERT INTO card_payment  values
(102985694,412356780939,'04/26/2024','29.99');

INSERT INTO card_payment  values
(102985695,412356780940,'04/27/2028','29.99');

INSERT INTO card_payment  values
(102985696,412356780941,'04/28/2024','29.99');
```

```
INSERT INTO card_payment  values
(102985696,412356780942,'04/29/2024','7.99');
```

```
INSERT INTO subscribe  values (1092,'24.99',3,'anna',7754570808);
INSERT INTO subscribe  values (1093,'7.99',6,'jasmine',3081577003);
INSERT INTO subscribe  values (1094,'7.99',12,'henry',6484332921);
INSERT INTO subscribe  values (1095,'24.99',3,'emma',9732898776);
INSERT INTO subscribe  values (1096,'24.99',3,'reid',7690257623);
INSERT INTO subscribe  values (1097,'29.99',3,'haris',2127787993);
INSERT INTO subscribe  values (1098,'29.99',6,'honey',7846938061);
INSERT INTO subscribe  values (1099,'29.99',6,'mary',1414608738);
INSERT INTO subscribe  values (1100,'7.99',6,'paige',1627714224);
INSERT INTO subscribe  values (1101,'24.99',12,'kimberly',6322814700);
INSERT INTO subscribe  values (1102,'7.99',12,'aida',4774272568);
INSERT INTO subscribe  values (1103,'7.99',12,'savana',3477082169);
INSERT INTO subscribe  values (1104,'24.99',3,'carina',6689953241);
INSERT INTO subscribe  values (1105,'24.99',6,'michelle',9783464344);
INSERT INTO subscribe  values (1106,'29.99',12,'arthur',1546019621);
INSERT INTO subscribe  values (1107,'29.99',3,'sophia',6451996252);
INSERT INTO subscribe  values (1108,'29.99',3,'lucas',9822669366);
INSERT INTO subscribe  values (1109,'7.99',6,'ada',4438452733);
INSERT INTO subscribe  values (1110,'24.99',3,'fiona',1693007751);
```

```
INSERT INTO subscribe  values (1111,'7.99',3,'emma',1693007752);
INSERT INTO subscribe  values (1112,'7.99',3,'anna',1693007753);
INSERT INTO subscribe  values (1113,'24.99',6,'jasmine',1693007754);
INSERT INTO subscribe  values (1114,'24.99',6,'henry',1693007755);
INSERT INTO subscribe  values (1115,'29.99',6,'emma',1693007756);
INSERT INTO subscribe  values (1116,'29.99',12,'reid',1693007757);
INSERT INTO subscribe  values (1117,'29.99',12,'haris',1693007758);
INSERT INTO subscribe  values (1118,'7.99',12,'honey',1693007759);
INSERT INTO subscribe  values (1119,'29.99',3,'mary',1693007760);
INSERT INTO subscribe  values (1120,'7.99',6,'paige',1693007761);
```

```
INSERT INTO subscription_features  values (1092,'Gold');
INSERT INTO subscription_features  values (1093,'Plus');
INSERT INTO subscription_features  values (1094,'Plus');
INSERT INTO subscription_features  values (1095,'Gold');
INSERT INTO subscription_features  values (1096,'Gold');
INSERT INTO subscription_features  values (1097,'Platinum');
INSERT INTO subscription_features  values (1098,'Platinum');
INSERT INTO subscription_features  values (1099,'Platinum');
INSERT INTO subscription_features  values (1100,'Plus');
INSERT INTO subscription_features  values (1101,'Gold');
```

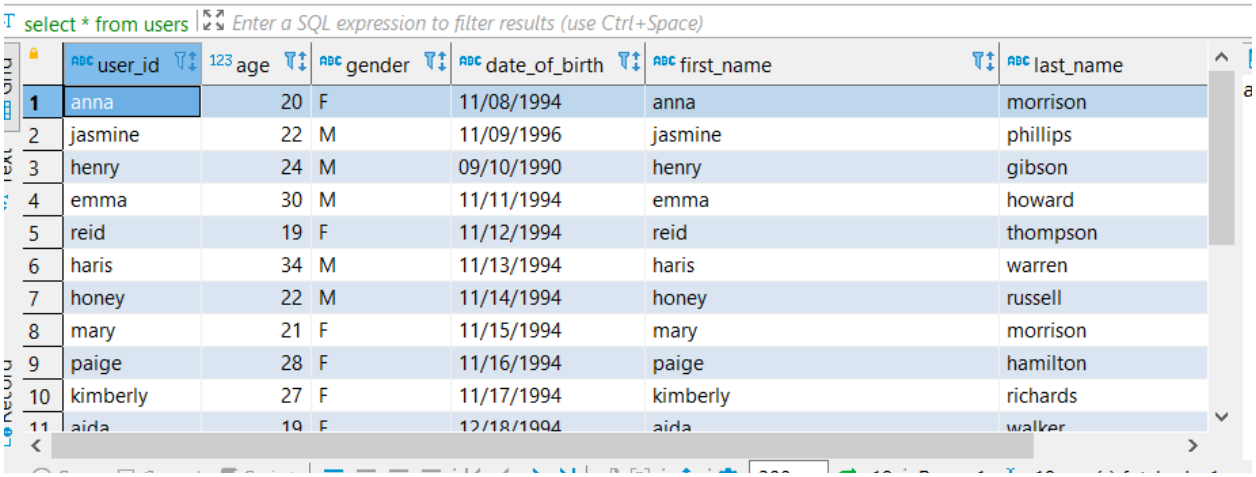
```
INSERT INTO plus_subscrption  values (1102,100001);
INSERT INTO plus_subscrption  values (1103,100002);
INSERT INTO plus_subscrption  values (1104,100003);
INSERT INTO plus_subscrption  values (1105,100004);
INSERT INTO plus_subscrption  values (1106,100005);
```

```
INSERT INTO gold_subscrption  values (1107,210006);
INSERT INTO gold_subscrption  values (1108,210007);
INSERT INTO gold_subscrption  values (1109,210008);
INSERT INTO gold_subscrption  values (1110,210009);
INSERT INTO gold_subscrption  values (1111,210010);
```

```
INSERT INTO platinum_subscrption  values (1110,310006,5);
INSERT INTO platinum_subscrption  values (1111,310007,6);
INSERT INTO platinum_subscrption  values (1112,310008,8);
INSERT INTO platinum_subscrption  values (1113,310009,3);
INSERT INTO platinum_subscrption  values (1114,310010,1);
```

Appendix

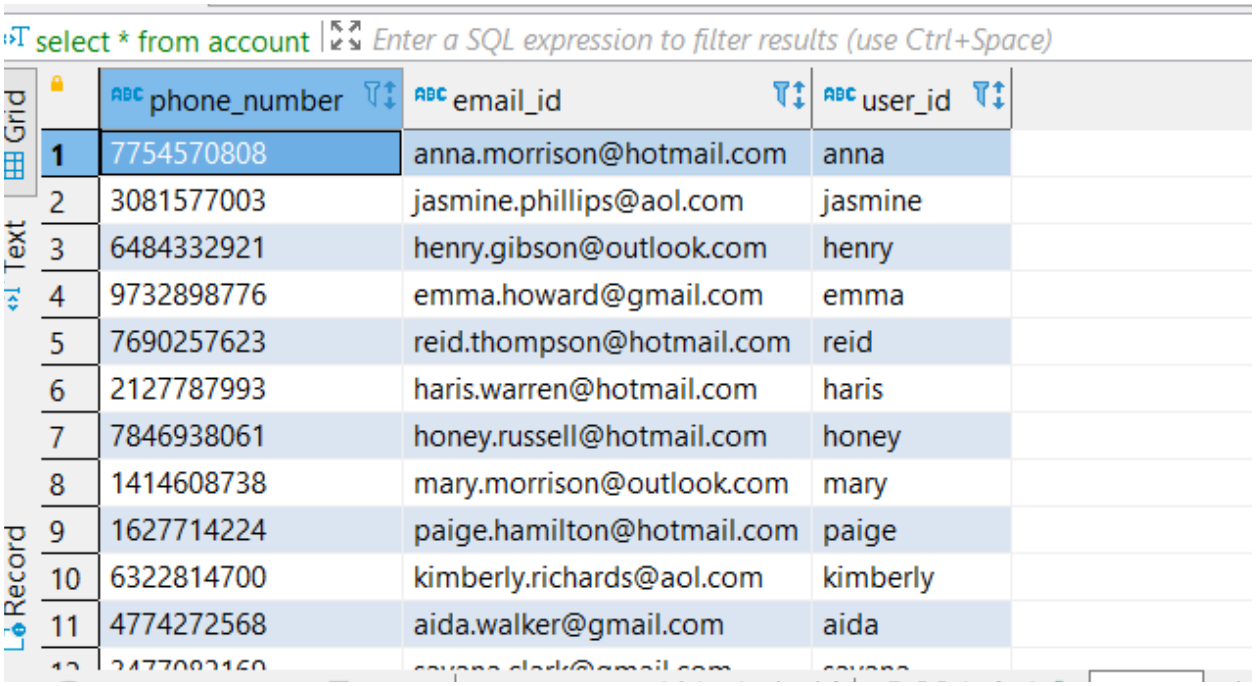
Figure 1: Example Data of User Table



select * from users | Enter a SQL expression to filter results (use Ctrl+Space)

	user_id	age	gender	date_of_birth	first_name	last_name
1	anna	20	F	11/08/1994	anna	morrison
2	jasmine	22	M	11/09/1996	jasmine	phillips
3	henry	24	M	09/10/1990	henry	gibson
4	emma	30	M	11/11/1994	emma	howard
5	reid	19	F	11/12/1994	reid	thompson
6	haris	34	M	11/13/1994	haris	warren
7	honey	22	M	11/14/1994	honey	russell
8	mary	21	F	11/15/1994	mary	morrison
9	paige	28	F	11/16/1994	paige	hamilton
10	kimberly	27	F	11/17/1994	kimberly	richards
11	aida	19	F	12/18/1994	aida	walker

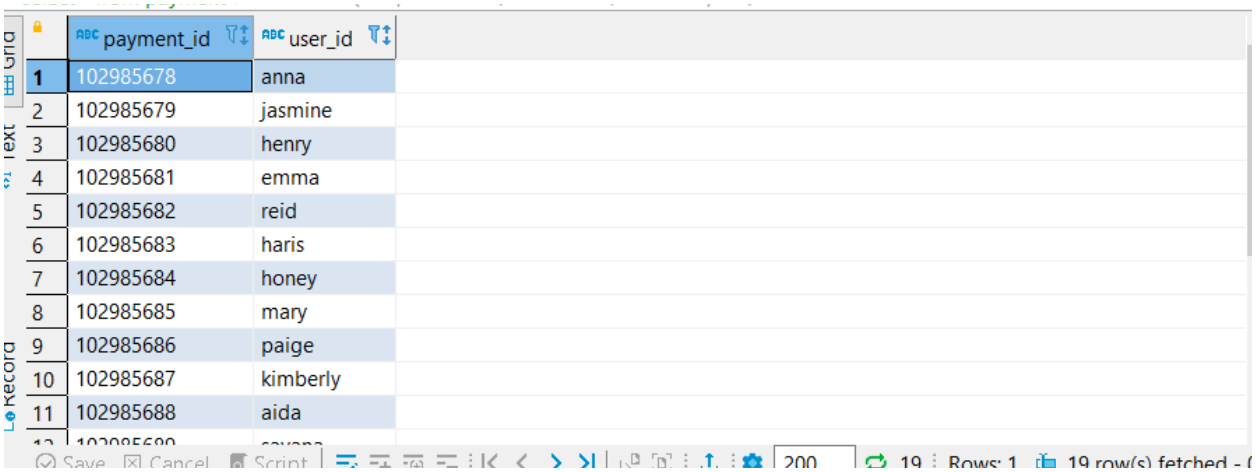
Figure 2: Example Data of Account Table



select * from account | Enter a SQL expression to filter results (use Ctrl+Space)

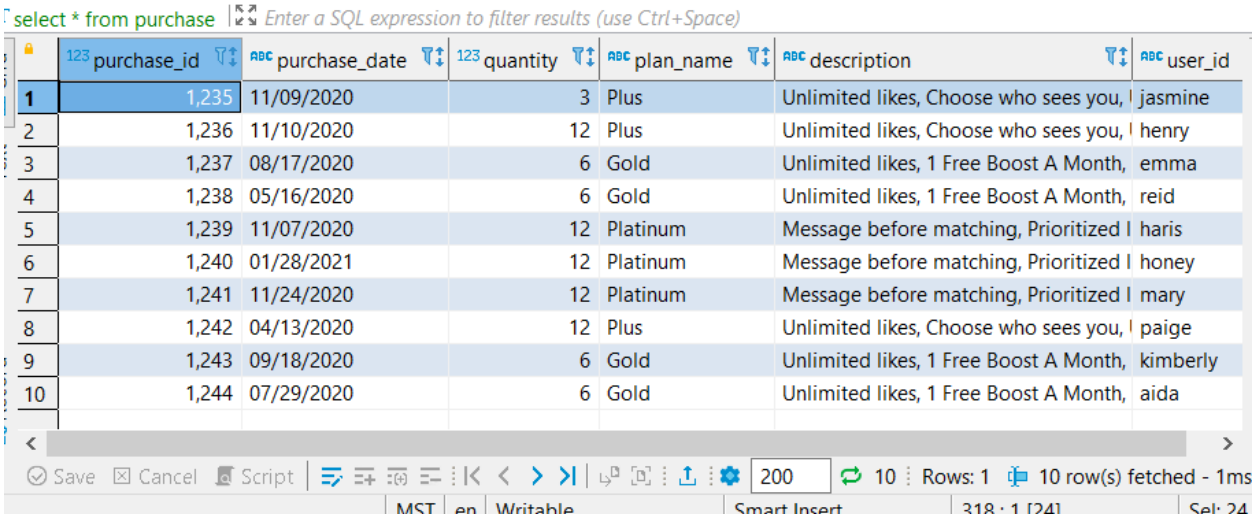
	phone_number	email_id	user_id
1	7754570808	anna.morrison@hotmail.com	anna
2	3081577003	jasmine.phillips@aol.com	jasmine
3	6484332921	henry.gibson@outlook.com	henry
4	9732898776	emma.howard@gmail.com	emma
5	7690257623	reid.thompson@hotmail.com	reid
6	2127787993	haris.warren@hotmail.com	haris
7	7846938061	honey.russell@hotmail.com	honey
8	1414608738	mary.morrison@outlook.com	mary
9	1627714224	paige.hamilton@hotmail.com	paige
10	6322814700	kimberly.richards@aol.com	kimberly
11	4774272568	aida.walker@gmail.com	aida

Figure 3: Example Data of Payment Table



	payment_id	user_id
1	102985678	anna
2	102985679	jasmine
3	102985680	henry
4	102985681	emma
5	102985682	reid
6	102985683	haris
7	102985684	honey
8	102985685	mary
9	102985686	paige
10	102985687	kimberly
11	102985688	aida

Figure 4: Example Data of Purchase Table



select * from purchase — Enter a SQL expression to filter results (use Ctrl+Space)

	purchase_id	purchase_date	quantity	plan_name	description	user_id
1	1,235	11/09/2020	3	Plus	Unlimited likes, Choose who sees you,	jasmine
2	1,236	11/10/2020	12	Plus	Unlimited likes, Choose who sees you,	henry
3	1,237	08/17/2020	6	Gold	Unlimited likes, 1 Free Boost A Month,	emma
4	1,238	05/16/2020	6	Gold	Unlimited likes, 1 Free Boost A Month,	reid
5	1,239	11/07/2020	12	Platinum	Message before matching, Prioritized l	haris
6	1,240	01/28/2021	12	Platinum	Message before matching, Prioritized l	honey
7	1,241	11/24/2020	12	Platinum	Message before matching, Prioritized l	mary
8	1,242	04/13/2020	12	Plus	Unlimited likes, Choose who sees you,	paige
9	1,243	09/18/2020	6	Gold	Unlimited likes, 1 Free Boost A Month,	kimberly
10	1,244	07/29/2020	6	Gold	Unlimited likes, 1 Free Boost A Month,	aida

Save Cancel Script 200 10 Rows: 1 10 row(s) fetched - 1ms

Group Contribution Table

Team Member	Hours Spent	Description of Work	Additional Comments
Zak Olson	6+	-Assisted in writing and organizing final paper	NA
Alfred Murala	10+	-Created SQL database -Populated SQL database with data entries	NA
Soma Kesanakurthi	3.5	-Assisted in creation of conceptual model -Assisted in creation of SQL database	NA

Lindsay Fielden	12+	-Created and organized slideshow -Assisted in creation of conceptual model -Created relational model -Created physical model -Assisted in writing and organizing final paper	NA