University of British Columbia, Vancouver
Department of Computer Science

CPSC 304 Project Cover Page

Milestone #: **2**

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Group Number: **82**

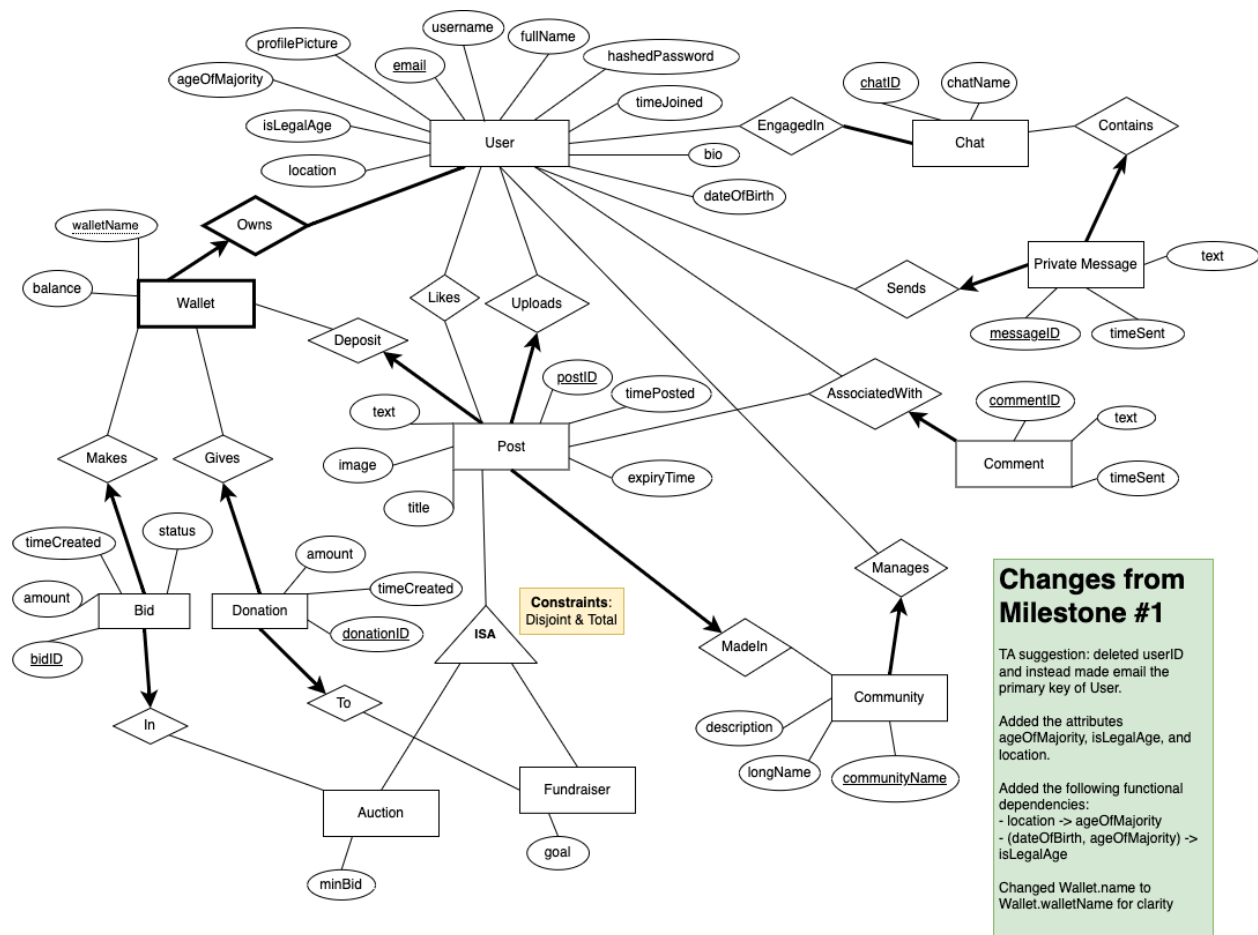| Name	Student Number	CS Alias (Userid)	Preferred E-mail Address
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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included 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.

2: Summary

Our project is a mix between a traditional social-media app and that of a bidding/fundraiser site. A User can post Auctions and Fundraisers in a Community as well as bid/donate to Auctions/Fundraisers with their Wallet(s). Furthermore, a User can maintain a Community and create private Chats with other Users.

3: ER Diagram

Additional notes:
- We do not allow deleting Posts once Posts have comments or bids/donations because Posts involve money and we want to keep a financial history as well as posting history. Likewise, once a Wallet has made bids or donations or is linked by a post, it cannot be deleted.
- Similarly, a User cannot be deleted if they have created a Wallet, interacted with a Post, interacted with a Community, or joined a Chat.

4: Relational Model

*All underlined attributes are <u>PRIMARY KEYS</u>, all bolded attributes are **FOREIGN KEYS**

- User(<u>email</u>: varchar[256], profilePicture: mediumblob, username: varchar[32], fullName: varchar[32], hashedPassword: varchar[256], timeJoined: datetime, bio: varchar[512], dateOfBirth: datetime, location: varchar[32], ageOfMajority: int)
    - CK: username
    - UNIQUE: username
    - NOT NULL: fullName, hashedPassword, timeJoined, username

- Post(<u>postId:</u> int, **postedEmail: varchar[256]**, **walletName: varchar[32]**, **walletEmail**: **varchar[256]**, **communityName: varchar[32]**, timePosted: datetime, expiryTime: datetime, text: varchar[512], image: mediumblob, title: varchar[32])
    - *merged Post table with "User→Uploads", "Deposit→Wallet", and "MadeIn→Community" relationships.*
    - NOT NULL: timePosted, expiryTime, title, postedEmail, walletName, walletEmail, communityName
    - **Foreign Keys:**
        - **postedEmail** references User(email)
        - **walletName** references Wallet(walletName)
        - **walletEmail** references Wallet(email)
        - **communityName** references Community(communityName)

- Auction(**<u>postID:</u> int**, minBid: float)
    - **Foreign Keys:**
        - **postID** references Post(postID)
    - ON DELETE CASCADE: Post(posdID)

- Fundraiser(**<u>postID:</u> int**, goal: float)
    - **Foreign Keys:**
        - **postID** references Post(postID)
    - ON DELETE CASCADE: Post(postID)

- Chat(<u>chatID</u>: int, chatName: varchar[32])
    - NOT NULL: chatName

- Wallet(<u>walletName:</u> varchar[32], **<u>email:</u> varchar[256]**, balance: float)

- NOT NULL: balance
- **Foreign Keys:**
    - **email** references User(email)

- Bid(<u>bidID</u>: int, **walletName: varchar[32]**, **email: varchar[256]**, **postID: int,** amount: float, timeCreated: datetime, status: varchar[16])
    - *merged Bid table with "In→Auction" and "Wallet→Makes" relationships.*
    - NOT NULL: amount, timeCreated, walletName, email, postId
    - **Foreign Keys:**
        - **walletName** references Wallet(walletName)
        - **email** references Wallet(email)
        - **postID** references Auction(postID)

- Donation(<u>donationID</u>: int, **walletName: varchar[32]**, **email: varchar[256]**, **postID: int,** amount: float, timeCreated: datetime)
    - *merged Donation table with "To→Fundraiser" and "Wallet→Gives" relationships.*
    - NOT NULL: amount, timeCreated, walletName, email, postId
    - **Foreign Keys:**
        - **walletName** references Wallet(walletName)
        - **email** references Wallet(email)
        - **postID** references Fundraiser(postID)

- Community(<u>communityName</u>: varchar[32], **email: varchar[256]**, longName: varchar[64], description: varchar[256])
    - *merged Community table with "User→Manages" relationship.*
    - NOT NULL: email, longName, description
    - **Foreign Keys:**
        - **email** references User(email)

- Comment(<u>commentID</u>: int, **email: varchar[256], postID: int,** text: varchar[256], timeSent: datetime)
    - *merged Comment table with "AssociatedWith→Post, User" relationship.*
    - NOT NULL: email, postId, timeSent, text
    - **Foreign Keys:**
        - **email** references User(email)
        - **postID** references Post(postID)

- PrivateMessage(<u>messageID</u>: int, **email: varchar[256], chatID: int,** text: varchar[256], timeSent: datetime)

- *merged the PrivateMessage table with "Chat→Contains" and "User→Sends" relationships.*
  - NOT NULL: email, chatId, timeSent, text
  - **Foreign Keys:**
    - **email** references User(email)
    - **chatID** references Chat(chatID)
  - ON DELETE CASCADE: Chat(chatID)

- Likes(**email: varchar[256], postID: int**)
  - **Foreign Keys:**
    - **email** references User(email)
    - **postID** references Post(postID)

- EngagedIn(**email: varchar[256], chatID: int**)
  - **Foreign Keys:**
    - **email** references User(email)
    - **chatID** references Chat(chatID)
  - ON DELETE CASCADE: Chat(chatID)

5: Functional Dependencies

Note: We bold the left-hand side only to make it easier to read
- **User.email** → User.profilePicture, User.username, User.fullName, User.hashedPassword, User.timeJoined, User.bio, User.dateOfBirth, User.location, User.ageOfMajority, User.isLegalAge

- **User.username** → User.profilePicture, User.email, User.fullName, User.hashedPassword, User.timeJoined, User.bio, User.dateOfBirth, User.location, User.ageOfMajority, User.isLegalAge

- **User.dateOfBirth, User.location, User.ageOfMajority** → User.isLegalAge

- **User.location** → User.ageOfMajority

- **Post.postID** → Post.postedEmail, Post.name, Post.walletEmail, Post.communityName, Post.timePosted, Post.expiryTime, Post.text, Post.title, Post.image.

- **Auction.postID** → Auction.minBid

- **Fundraiser.postID** → Fundraiser.goal

- **Chat.chatID** → Chat.chatName

- **Wallet.walletName, Wallet.email** → Wallet.balance

- **Bid.bidID** → Bid.name, Bid.postID, Bid.amount, Bid.timeCreated, Bid.status

- **Donation.donationID** → Donation.name, Donation.postID, Donation.amount, Donation.timeCreated

- **Community.communityName** → Community.email, Community.longName, Community.description

- **Comment.commentID** → Comment.email, Comment.postID, Comment.text, Comment.timeSent

- **PrivateMessage.messageID** → PrivateMessage.email, PrivateMessage.chatID, PrivateMessage.text, PrivateMessage.timeSent

6: Normalization (3NF - lossless join)

<u>User (Primary Key: Email, Candidate Key: Username)</u>

<u>Original FD's of User:</u>
Location, dateOfBirth → isLegalAge
Location → ageOfMajority
email → profilePicture, username, fullName, hashedPassword, timeJoined, bio, dateOfBirth, location, ageOfMajority, isLegalAge
username → profilePicture, email, fullName, hashedPassword, timeJoined, bio, dateOfBirth, location, ageOfMajority, isLegalAge

<u>Minimal Cover of User:</u>
Location, dateOfBirth → isLegalAge *(not in 3NF)*
Location → AgeOfMajority *(not in 3NF)*
Username → Email
Email → profilePicture
Email → username
Email → fullName

Email → hashedPassword
Email → timeJoined
Email → bio
Email → dateOfBirth
Email → location
~~Email → ageOfMajority~~   ← *redundant*
~~Email → isLegalAge~~   ← *redundant*

1. **Decompose on User (lossless-join method) with location, dateOfBirth → isLegalAge:**
- LocationDateOfBirthLegalAge(<u>location, dateOfBirth</u>, isLegalAge)
- U2(email, profilePicture, username, fullName, hashedPassword, timeJoined, bio, dateOfBirth, location, ageOfMajority)

2. **Decompose on U2 with location → ageOfMajority**
- LocationAgeOfMajority(<u>location</u>, ageOfMajority)
- User(<u>email</u>, profilePicture, username, fullName, hashedPassword, timeJoined, bio, dateOfBirth, location)

3. **We are missing Username → Email so add that one back**
- U5(username, email)

4. **Since U5 is redundant (email gives username in User), we delete U5**

<u>**Final Tables for User:**</u>

- LocationAgeOfMajority(<u>location</u>: varchar[32], ageOfMajority: int)
    - NOT NULL: ageOfMajority

- LocationDateOfBirthLegalAge(**<u>location</u>:** varchar[32], <u>dateOfBirth</u>: datetime, isLegalAge: boolean)
    - NOT NULL: isLegalAge
    - **Foreign Keys:**
        - **location** references LocationAgeOfMajority(location)

- User(<u>email</u>: varchar[256], username: varchar[32], profilePicture: mediumblob, fullName: varchar[32], hashedPassword: varchar[256], timeJoined: datetime, bio: varchar[512], **dateOfBirth: datetime**, **location: varchar[32]**)

- NOT NULL: fullName, hashedPassword, timeJoined, username, dateOfBirth, location,
- UNIQUE: username
- **Foreign Keys:**
    - **dateOfBirth** references LocationDateOfBirthLegalAge(dateOfBirth)
    - **location** references LocationAgeOfMajority(location)

Other Tables (already in 3NF since none have extra FD's):

- Post(postId: int, **postedEmail: varchar[256]**, **walletName: varchar[32]**, **walletEmail**: **varchar[256]**, **communityName: varchar[32]**, timePosted: datetime, expiryTime: datetime, text: varchar[512], image: mediumblob, title: varchar[32])
    - *merged Post table with "User→Uploads", "Deposit→Wallet", and "MadeIn→Community" relationships.*
    - NOT NULL: timePosted, expiryTime, title, postedEmail, walletName, walletEmail, communityName
    - **Foreign Keys:**
        - **postedEmail** references User(email)
        - **walletName** references Wallet(walletName)
        - **walletEmail** references Wallet(email)
        - **communityName** references Community(communityName)

- Auction(**postID: int**, minBid: float)
    - **Foreign Keys:**
        - **postID** references Post(postID)
    - ON DELETE CASCADE: Post(postID)

- Fundraiser(**postID: int**, goal: float)
    - **Foreign Keys:**
        - **postID** references Post(postID)
    - ON DELETE CASCADE: Post(postID)

- Chat(chatID: int, chatName: varchar[32])
    - NOT NULL: chatName

- Wallet(walletName: varchar[32], **email: varchar[256]**, balance: float)
    - NOT NULL: balance
    - **Foreign Keys:**
        - **email** references User(email)

- Bid(<u>bidID</u>: int, **walletName: varchar[32]**, **email: varchar[256]**, **postID: int,**
  amount: float, timeCreated: datetime, status: varchar[16])
    - *merged Bid table with "In→Auction" and "Wallet→Makes" relationships.*
    - NOT NULL: amount, timeCreated, walletName, email, postId
    - **Foreign Keys:**
        - **walletName** references Wallet(walletName)
        - **email** references Wallet(email)
        - **postID** references Auction(postID)

- Donation(<u>donationID</u>: int, **walletName: varchar[32]**, **email: varchar[256]**,
  postID: int, amount: float, timeCreated: datetime)
    - *merged Donation table with "To→Fundraiser" and "Wallet→Gives" relationships.*
    - NOT NULL: amount, timeCreated, walletName, email, postId
    - **Foreign Keys:**
        - **walletName** references Wallet(walletName)
        - **email** references Wallet(email)
        - **postID** references Fundraiser(postID)

- Community(<u>communityName</u>: varchar[32], **email: varchar[256]**, longName:
  varchar[64], description: varchar[256])
    - *merged Community table with "User→Manages" relationship.*
    - NOT NULL: email, longName, description
    - **Foreign Keys:**
        - **email** references User(email)

- Comment(<u>commentID</u>: int, **email: varchar[256], postID: int,** text: varchar[256],
  timeSent: datetime)
    - *merged Comment table with "AssociatedWith→Post, User" relationship.*
    - NOT NULL: email, postId, timeSent, text
    - **Foreign Keys:**
        - **email** references User(email)
        - **postID** references Post(postID)

- PrivateMessage(<u>messageID</u>: int, **email: varchar[256], chatID: int,** text:
  varchar[256], timeSent: datetime)
    - *merged the PrivateMessage table with "Chat→Contains" and "User→Sends" relationships.*
    - NOT NULL: email, chatId, timeSent, text

- **Foreign Keys:**
    - **email** references User(email)
    - **chatID** references Chat(chatID)
- ON DELETE CASCADE: Chat(chatID)

- Likes(**email: varchar[256], postID: int**)
    - **Foreign Keys:**
        - **email** references User(email)
        - **postID** references Post(postID)

- EngagedIn(**email: varchar[256], chatID: int**)
    - **Foreign Keys:**
        - **email** references User(email)
        - **chatID** references Chat(chatID)
    - ON DELETE CASCADE: Chat(chatID)

7: SQL DDL Statements

User
CREATE TABLE User(
- email VARCHAR(256) PRIMARY KEY,
- username VARCHAR(32) NOT NULL UNIQUE,
- profilePicture MEDIUMBLOB,
- fullName VARCHAR(32) NOT NULL,
- hashedPassword VARCHAR(256) NOT NULL,
- timeJoined DATETIME NOT NULL,
- bio VARCHAR(512),
- dateOfBirth DATE,
- location VARCHAR(32),
- FOREIGN KEY (location, dateOfBirth) REFERENCES
    LocationDateOfBirthLegalAge(location, dateOfBirth)
);

LocationDateOfBirthLegalAge
CREATE TABLE LocationDateOfBirthLegalAge (
- location VARCHAR(32),
- dateOfBirth DATE,
- isLegalAge BOOLEAN NOT NULL,
- PRIMARY KEY (location, dateOfBirth),
- FOREIGN KEY (location) REFERENCES LocationAgeOfMajority(location)

);

LocationAgeOfMajority
CREATE TABLE LocationAgeOfMajority (
- location VARCHAR(32) PRIMARY KEY,
- ageOfMajority INTEGER NOT NULL
);

Post
CREATE TABLE Post(
- postID INT PRIMARY KEY,
- postedEmail VARCHAR(256) NOT NULL,
- walletName VARCHAR(32) NOT NULL,
- walletEmail VARCHAR(256) NOT NULL,
- communityName VARCHAR(32) NOT NULL,
- timePosted DATETIME NOT NULL,
- expiryTime DATETIME NOT NULL,
- text VARCHAR(512),
- image MEDIUMBLOB,
- title VARCHAR(32) NOT NULL,
- FOREIGN KEY(postedEmail) REFERENCES User(email),
- FOREIGN KEY(walletName, walletEmail) REFERENCES Wallet(walletName, email),
- FOREIGN KEY(communityName) REFERENCES Community(communityName)
);

Auction
CREATE TABLE Auction(
- postID INT NOT NULL,
- minBid FLOAT,
- PRIMARY KEY(postID),
- FOREIGN KEY(postID) REFERENCES Post(postID) ON DELETE CASCADE
);

Fundraiser
CREATE TABLE Fundraiser(
- postID INT NOT NULL,
- goal FLOAT,
- PRIMARY KEY(postID),

```
    -   FOREIGN KEY(postID) REFERENCES Post(postID) ON DELETE CASCADE
);
```

Chat
```
CREATE TABLE Chat(
    -   chatID INT PRIMARY KEY,
    -   chatName VARCHAR(32)
);
```

Wallet
```
CREATE TABLE Wallet(
    -   walletName VARCHAR(32),
    -   email VARCHAR(256),
    -   balance FLOAT NOT NULL,
    -   PRIMARY KEY(walletName, email),
    -   FOREIGN KEY(email) REFERENCES User(email)
);
```

Bid
```
CREATE TABLE Bid(
    -   bidID INT PRIMARY KEY,
    -   walletName VARCHAR(32) NOT NULL,
    -   email VARCHAR(256) NOT NULL,
    -   postID INT NOT NULL,
    -   amount FLOAT NOT NULL,
    -   timeCreated DATETIME NOT NULL,
    -   status VARCHAR(16),
    -   FOREIGN KEY(walletName, email) REFERENCES Wallet(walletName, email),
    -   FOREIGN KEY(postID) REFERENCES Auction(postID)
);
```

Donation
```
CREATE TABLE Donation(
    -   donationID INT PRIMARY KEY,
    -   walletName VARCHAR(32) NOT NULL,
    -   email VARCHAR(256) NOT NULL,
    -   postID INT NOT NULL,
    -   amount FLOAT NOT NULL,
    -   timeCreated DATETIME NOT NULL,
    -   FOREIGN KEY(walletName, email) REFERENCES Wallet(walletName, email),
```

```
    -   FOREIGN KEY(postID) REFERENCES Fundraiser(postID)
);
```

Community
```
CREATE TABLE Community(
    -   communityName VARCHAR(32) PRIMARY KEY,
    -   email VARCHAR(256) NOT NULL,
    -   longName VARCHAR(64) NOT NULL,
    -   description VARCHAR(256) NOT NULL,
    -   FOREIGN KEY(email) REFERENCES User(email)
);
```

Comment
```
CREATE TABLE Comment(
    -   commentID INT PRIMARY KEY,
    -   email VARCHAR(256) NOT NULL,
    -   postID INT NOT NULL,
    -   text VARCHAR(256) NOT NULL,
    -   timeSent DATETIME NOT NULL,
    -   FOREIGN KEY(email) REFERENCES User(email),
    -   FOREIGN KEY(postID) REFERENCES Post(postID)
);
```

PrivateMessage
```
CREATE TABLE PrivateMessage(
    -   messageID INT PRIMARY KEY,
    -   email VARCHAR(256) NOT NULL,
    -   chatID INT NOT NULL,
    -   text VARCHAR(256) NOT NULL,
    -   timeSent DATETIME NOT NULL,
    -   FOREIGN KEY(email) REFERENCES User(email),
    -   FOREIGN KEY(chatID) REFERENCES Chat(chatID) ON DELETE CASCADE
);
```

Likes
```
CREATE TABLE Likes(
    -   email VARCHAR(256) NOT NULL,
    -   postID INT NOT NULL,
    -   PRIMARY KEY(email, postID),
    -   FOREIGN KEY(email) REFERENCES User(email),
```

- FOREIGN KEY(postID) REFERENCES Post(postID)
);

EngagedIn
CREATE TABLE EngagedIn(
- email VARCHAR(256) NOT NULL,
- chatID INT NOT NULL,
- PRIMARY KEY(email, chatID),
- FOREIGN KEY(email) REFERENCES User(email),
- FOREIGN KEY(chatID) REFERENCES Chat(chatID) ON DELETE CASCADE
);

8: INSERT Statements

User
INSERT INTO LocationAgeOfMajority VALUES ("Liechtenstein", 22);
INSERT INTO LocationAgeOfMajority VALUES ("Eritrea", 20);
INSERT INTO LocationAgeOfMajority VALUES ("Ukraine", 21);
INSERT INTO LocationAgeOfMajority VALUES ("Nicaragua", 18);
INSERT INTO LocationAgeOfMajority VALUES ("Christmas Island", 17);
INSERT INTO LocationAgeOfMajority VALUES ("Turkmenistan", 18);
INSERT INTO LocationAgeOfMajority VALUES ("Yemen", 21);
INSERT INTO LocationAgeOfMajority VALUES ("Northern Mariana Islands", 18);
INSERT INTO LocationAgeOfMajority VALUES ("Korea", 19);
INSERT INTO LocationAgeOfMajority VALUES ("Romania", 20);
INSERT INTO LocationDateOfBirthLegalAge VALUES ("Christmas Island", "1988-02-28", True);
INSERT INTO LocationDateOfBirthLegalAge VALUES ("Romania", "2018-09-15", False);
INSERT INTO LocationDateOfBirthLegalAge VALUES ("Korea", "2020-12-13", False);
INSERT INTO LocationDateOfBirthLegalAge VALUES ("Liechtenstein", "2017-06-25", False);
INSERT INTO LocationDateOfBirthLegalAge VALUES ("Eritrea", "1980-06-16", True);
INSERT INTO LocationDateOfBirthLegalAge VALUES ("Turkmenistan", "1996-01-30", True);
INSERT INTO LocationDateOfBirthLegalAge VALUES ("Northern Mariana Islands", "1981-06-14", True);
INSERT INTO LocationDateOfBirthLegalAge VALUES ("Ukraine", "1970-06-28", True);
INSERT INTO LocationDateOfBirthLegalAge VALUES ("Yemen", "1974-05-01", True);

INSERT INTO LocationDateOfBirthLegalAge VALUES ("Nicaragua", "1991-03-18", True);
INSERT INTO User VALUES ("woodgregory@example.net", "trouble", NULL, "Benjamin Schmitt", "09a3871fa15155c510b8b23733c47be8", "1987-05-23T12:03:01", "million ground human", "2017-06-25", "Liechtenstein");
INSERT INTO User VALUES ("cgarza@example.org", "how", NULL, "Karen Ross", "533cb108fc75cac8f5c20d6fd8ccdf2e", "2017-02-02T03:31:43", "federal partner also", "1980-06-16", "Eritrea");
INSERT INTO User VALUES ("millerdaniel@example.com", "financial", NULL, "Charles Fox", "c6187c365b23b135ff561c8c278cdcf1", "1990-04-29T19:16:19", "air his develop", "1970-06-28", "Ukraine");

INSERT INTO User VALUES ("harrislatasha@example.org", "yard", NULL, "Lori Butler", "bcf6738be52090341bfef777bdeb4ff8", "1974-12-19T08:27:43", "tend policy management", "1991-03-18", "Nicaragua");
INSERT INTO User VALUES ("karen15@example.com", "network", NULL, "Kari Griffin", "85d80aa21d6735e7b6e7fe1eb7e6050c", "2023-05-10T23:57:07", "boy PM relate", "1988-02-28", "Christmas Island");
INSERT INTO User VALUES ("chris36@example.net", "start", NULL, "Brandon Gonzalez", "0094386106b4a99d899c014bb31884e2", "2000-08-15T16:40:11", "smile join ago", "1996-01-30", "Turkmenistan");
INSERT INTO User VALUES ("rwalter@example.org", "former", NULL, "Jacob Mack", "d7415cdcc79ea33a41a4b527f9f262ee", "1985-02-13T07:32:48", "word same game", "1974-05-01", "Yemen");
INSERT INTO User VALUES ("ronald84@example.org", "activity", NULL, "Laura Kennedy", "7e22c0dee896798a63e251fc4ed55934", "1999-06-06T11:11:51", "bring final through", "1981-06-14", "Northern Mariana Islands");
INSERT INTO User VALUES ("hallmatthew@example.org", "foot", NULL, "Derrick Bridges", "3b3ad97a9aee71b4e37df8fdbe4b9beb", "2000-03-25T16:17:07", "Mrs school until", "2020-12-13", "Korea");
INSERT INTO User VALUES ("jeffreyreeves@example.org", "wear", NULL, "Robert Woods", "87db52446d964090b4b7c862fc590b0c", "1980-05-09T14:54:17", "free anything send", "2018-09-15", "Romania");

Post
INSERT INTO Post VALUES (1, "ronald84@example.org", "provide customer", "millerdaniel@example.com", "beautiful", "1992-06-05T23:10:28", "1993-07-05T23:10:28", "expert group decide", NULL, "join should");
INSERT INTO Post VALUES (2, "cgarza@example.org", "send man", "cgarza@example.org", "more", "1987-01-20T23:57:12", "1988-02-19T23:57:12", "thus should now", NULL, "physical case");
INSERT INTO Post VALUES (3, "woodgregory@example.net", "Mrs increase", "chris36@example.net", "among", "1985-03-25T03:32:03", "1986-04-24T03:32:03", "out education I", NULL, "question point");
INSERT INTO Post VALUES (4, "rwalter@example.org", "send man", "cgarza@example.org", "side", "2013-12-04T05:55:04", "2015-01-03T05:55:04", "edge else recent", NULL, "popular perform");
INSERT INTO Post VALUES (5, "millerdaniel@example.com", "Mrs increase", "chris36@example.net", "among", "1979-12-22T04:03:16", "1981-01-20T04:03:16", "big design low", NULL, "with citizen");
INSERT INTO Post VALUES (6, "harrislatasha@example.org", "provide customer", "millerdaniel@example.com", "side", "1998-02-06T02:20:55", "1999-03-08T02:20:55", "single left determine", NULL, "new method");
INSERT INTO Post VALUES (7, "cgarza@example.org", "late themselves", "ronald84@example.org", "beautiful", "2006-03-18T01:21:49", "2007-04-17T01:21:49", "support rate point", NULL, "per figure");
INSERT INTO Post VALUES (8, "karen15@example.com", "late themselves", "ronald84@example.org", "nature", "2019-05-01T16:22:50", "2020-05-30T16:22:50", "sort hair order", NULL, "style responsibility");
INSERT INTO Post VALUES (9, "hallmatthew@example.org", "them computer", "cgarza@example.org", "star", "2004-12-31T02:07:11", "2006-01-30T02:07:11", "like number word", NULL, "water believe");
INSERT INTO Post VALUES (10, "cgarza@example.org", "send man", "cgarza@example.org", "body", "1975-10-09T06:12:48", "1976-11-07T06:12:48", "notice marriage not", NULL, "thus kid");
INSERT INTO Post VALUES (11, "harrislatasha@example.org", "them computer", "cgarza@example.org", "star", "1993-04-27T04:53:54", "1994-05-27T04:53:54", "democratic amount kid", NULL, "room town");

INSERT INTO Post VALUES (12, "jeffreyreeves@example.org", "them computer", "cgarza@example.org", "body", "1976-01-20T14:43:52", "1977-02-18T14:43:52", "party third teacher", NULL, "tonight word");
INSERT INTO Post VALUES (13, "ronald84@example.org", "send man", "cgarza@example.org", "more", "2005-06-10T21:07:31", "2006-07-10T21:07:31", "early article subject", NULL, "shake food");
INSERT INTO Post VALUES (14, "rwalter@example.org", "help involve", "chris36@example.net", "benefit", "2010-06-09T21:03:07", "2011-07-09T21:03:07", "car chance project", NULL, "represent organization");
INSERT INTO Post VALUES (15, "woodgregory@example.net", "late themselves", "ronald84@example.org", "body", "2005-09-11T15:18:11", "2006-10-11T15:18:11", "movement for defense", NULL, "major campaign");
INSERT INTO Post VALUES (16, "millerdaniel@example.com", "send man", "cgarza@example.org", "more", "2020-07-01T05:43:26", "2021-07-31T05:43:26", "citizen history force", NULL, "check avoid");
INSERT INTO Post VALUES (17, "karen15@example.com", "much seven", "harrislatasha@example.org", "beautiful", "1991-07-11T15:01:17", "1992-08-09T15:01:17", "add success home", NULL, "guy leg");
INSERT INTO Post VALUES (18, "rwalter@example.org", "official raise", "cgarza@example.org", "everybody", "2000-07-08T11:27:35", "2001-08-07T11:27:35", "environment weight think", NULL, "material week");
INSERT INTO Post VALUES (19, "harrislatasha@example.org", "provide customer", "millerdaniel@example.com", "more", "2000-01-24T15:23:20", "2001-02-22T15:23:20", "son himself Republican", NULL, "half meeting");
INSERT INTO Post VALUES (20, "karen15@example.com", "help involve", "chris36@example.net", "among", "2023-01-25T02:40:39", "2024-02-24T02:40:39", "guy indeed and", NULL, "nearly argue");

Auction
INSERT INTO Auction VALUES (1, 3550.95);
INSERT INTO Auction VALUES (2, 5392.71);
INSERT INTO Auction VALUES (3, 4.46);
INSERT INTO Auction VALUES (4, NULL);
INSERT INTO Auction VALUES (5, 9.63);
INSERT INTO Auction VALUES (6, 0.01);
INSERT INTO Auction VALUES (7, 42235.16);
INSERT INTO Auction VALUES (8, 55563.29);
INSERT INTO Auction VALUES (9, 0.92);
INSERT INTO Auction VALUES (10, 76496.81);

Fundraiser

INSERT INTO Fundraiser VALUES (11, 6202.05);
INSERT INTO Fundraiser VALUES (12, 5506.01);
INSERT INTO Fundraiser VALUES (13, 73668.05);
INSERT INTO Fundraiser VALUES (14, NULL);
INSERT INTO Fundraiser VALUES (15, 97992.89);
INSERT INTO Fundraiser VALUES (16, 0.96);
INSERT INTO Fundraiser VALUES (17, 0.57);
INSERT INTO Fundraiser VALUES (18, 4775.0);
INSERT INTO Fundraiser VALUES (19, 0.73);

INSERT INTO Fundraiser VALUES (20, 85.72);

Chat
INSERT INTO Chat VALUES (1, "per truth article");
INSERT INTO Chat VALUES (2, "day activity process");
INSERT INTO Chat VALUES (3, "tell oil front");
INSERT INTO Chat VALUES (4, "stock democratic federal");
INSERT INTO Chat VALUES (5, "religious summer between");
INSERT INTO Chat VALUES (6, "significant attorney investment");
INSERT INTO Chat VALUES (7, "head site benefit");
INSERT INTO Chat VALUES (8, "improve thing eight");
INSERT INTO Chat VALUES (9, "door expert sea");
INSERT INTO Chat VALUES (10, "white remain quality");

Wallet
INSERT INTO Wallet VALUES ("help involve", "chris36@example.net", 0.68);
INSERT INTO Wallet VALUES ("them computer", "cgarza@example.org", 5.4);
INSERT INTO Wallet VALUES ("much seven", "harrislatasha@example.org", 94.05);
INSERT INTO Wallet VALUES ("provide customer", "millerdaniel@example.com", 62.14);
INSERT INTO Wallet VALUES ("send man", "cgarza@example.org", 59336.81);
INSERT INTO Wallet VALUES ("late themselves", "ronald84@example.org", 8.19);
INSERT INTO Wallet VALUES ("official raise", "cgarza@example.org", 5.45);
INSERT INTO Wallet VALUES ("knowledge international", "ronald84@example.org", 3381.56);
INSERT INTO Wallet VALUES ("kitchen especially", "harrislatasha@example.org", 1059.94);
INSERT INTO Wallet VALUES ("Mrs increase", "chris36@example.net", 7309.75);

Bid
INSERT INTO Bid VALUES (1, "late themselves", "ronald84@example.org", 5, 183.47, "2015-11-01T05:58:42", "Paid");
INSERT INTO Bid VALUES (2, "send man", "cgarza@example.org", 6, 751.67, "1970-09-29T09:22:46", "Highest");
INSERT INTO Bid VALUES (3, "much seven", "harrislatasha@example.org", 1, 362.46, "2023-09-24T16:43:20", "Paid");
INSERT INTO Bid VALUES (4, "official raise", "cgarza@example.org", 10, 788.9, "1973-12-14T09:28:36", NULL);
INSERT INTO Bid VALUES (5, "official raise", "cgarza@example.org", 7, 78610.8, "2009-07-17T17:25:16", "Paid");
INSERT INTO Bid VALUES (6, "kitchen especially", "harrislatasha@example.org", 3, 98.35, "2006-12-07T15:47:49", NULL);
INSERT INTO Bid VALUES (7, "official raise", "cgarza@example.org", 1, 63.39, "1978-11-19T18:28:32", NULL);
INSERT INTO Bid VALUES (8, "provide customer", "millerdaniel@example.com", 1, 0.08, "1972-08-14T07:11:11", "Paid");
INSERT INTO Bid VALUES (9, "help involve", "chris36@example.net", 8, 1679.43, "1976-06-07T06:08:49", "Highest");

INSERT INTO Bid VALUES (10, "official raise", "cgarza@example.org", 8, 7.71, "1986-11-06T00:31:55", NULL);

Donation
INSERT INTO Donation VALUES (1, "Mrs increase", "chris36@example.net", 11, 96447.01, "1983-07-15T13:57:45");
INSERT INTO Donation VALUES (2, "late themselves", "ronald84@example.org", 12, 37.95, "1994-07-22T08:03:24");
INSERT INTO Donation VALUES (3, "much seven", "harrislatasha@example.org", 17, 4.95, "1974-05-26T23:36:59");
INSERT INTO Donation VALUES (4, "help involve", "chris36@example.net", 11, 0.87, "2016-10-28T02:08:57");
INSERT INTO Donation VALUES (5, "knowledge international", "ronald84@example.org", 14, 726.49, "1980-10-30T02:44:52");
INSERT INTO Donation VALUES (6, "help involve", "chris36@example.net", 15, 16.56, "2010-10-29T22:56:36");
INSERT INTO Donation VALUES (7, "kitchen especially", "harrislatasha@example.org", 14, 87044.52, "1973-03-29T16:55:58");
INSERT INTO Donation VALUES (8, "provide customer", "millerdaniel@example.com", 11, 7.98, "1977-11-27T12:13:54");
INSERT INTO Donation VALUES (9, "help involve", "chris36@example.net", 19, 2167.84, "1971-05-28T10:16:57");

Community
INSERT INTO Community VALUES ("more", "karen15@example.com", "north member", "may professor clear community in");
INSERT INTO Community VALUES ("among", "ronald84@example.org", "green response", "audience quickly federal respond house");
INSERT INTO Community VALUES ("body", "hallmatthew@example.org", "national onto", "than former they unit draw");
INSERT INTO Community VALUES ("nature", "jeffreyreeves@example.org", "son bit", "new organization not husband identify");
INSERT INTO Community VALUES ("benefit", "jeffreyreeves@example.org", "all adult", "share return decade event professional");
INSERT INTO Community VALUES ("beautiful", "ronald84@example.org", "quickly term", "person think anything war traditional");
INSERT INTO Community VALUES ("side", "millerdaniel@example.com", "time four", "bad prepare young anything it");
INSERT INTO Community VALUES ("everybody", "hallmatthew@example.org", "hour particularly", "wait poor sort economy our");
INSERT INTO Community VALUES ("star", "ronald84@example.org", "fly become", "series many draw nor strong");

Comment

INSERT INTO Comment VALUES (1, "woodgregory@example.net", 5, "indeed war fact", "2019-03-31T12:41:15");
INSERT INTO Comment VALUES (2, "rwalter@example.org", 9, "degree same sort", "1979-01-27T17:13:38");
INSERT INTO Comment VALUES (3, "woodgregory@example.net", 4, "rise system sense", "1999-08-13T23:01:18");
INSERT INTO Comment VALUES (4, "harrislatasha@example.org", 6, "huge clearly car", "1976-08-13T19:43:55");
INSERT INTO Comment VALUES (5, "cgarza@example.org", 5, "former upon sport", "1971-02-20T11:26:26");
INSERT INTO Comment VALUES (6, "ronald84@example.org", 2, "for onto stay", "1983-10-21T03:16:56");
INSERT INTO Comment VALUES (7, "cgarza@example.org", 4, "brother church our", "1996-10-15T18:22:07");
INSERT INTO Comment VALUES (8, "ronald84@example.org", 10, "mission media enough", "2014-08-04T06:15:16");
INSERT INTO Comment VALUES (9, "ronald84@example.org", 10, "by movement quite", "1992-01-13T01:35:47");

PrivateMessage

INSERT INTO PrivateMessage VALUES (1, "hallmatthew@example.org", 8, "life popular million", "1988-03-22T06:53:17");
INSERT INTO PrivateMessage VALUES (2, "jeffreyreeves@example.org", 9, "despite medical safe", "2003-08-31T22:31:43");
INSERT INTO PrivateMessage VALUES (3, "woodgregory@example.net", 4, "expect watch right", "2002-11-24T10:16:00");
INSERT INTO PrivateMessage VALUES (4, "harrislatasha@example.org", 10, "foot understand little", "1972-07-16T19:26:26");
INSERT INTO PrivateMessage VALUES (5, "millerdaniel@example.com", 7, "authority open over", "2016-10-10T05:51:15");
INSERT INTO PrivateMessage VALUES (6, "jeffreyreeves@example.org", 9, "pull best chair", "2013-02-23T11:30:18");
INSERT INTO PrivateMessage VALUES (7, "jeffreyreeves@example.org", 10, "lose return customer", "2015-04-30T20:26:52");
INSERT INTO PrivateMessage VALUES (8, "woodgregory@example.net", 4, "star process election", "2004-07-30T07:56:19");
INSERT INTO PrivateMessage VALUES (9, "woodgregory@example.net", 4, "case book spring", "1970-04-23T22:22:17");

Likes

INSERT INTO Likes VALUES ("karen15@example.com", 8);
INSERT INTO Likes VALUES ("millerdaniel@example.com", 9);
INSERT INTO Likes VALUES ("chris36@example.net", 3);
INSERT INTO Likes VALUES ("ronald84@example.org", 4);
INSERT INTO Likes VALUES ("jeffreyreeves@example.org", 6);
INSERT INTO Likes VALUES ("cgarza@example.org", 5);

INSERT INTO Likes VALUES ("harrislatasha@example.org", 7);
INSERT INTO Likes VALUES ("rwalter@example.org", 2);
INSERT INTO Likes VALUES ("rwalter@example.org", 10);

EngagedIn
INSERT INTO EngagedIn VALUES ("harrislatasha@example.org", 10);
INSERT INTO EngagedIn VALUES ("millerdaniel@example.com", 7);
INSERT INTO EngagedIn VALUES ("chris36@example.net", 5);
INSERT INTO EngagedIn VALUES ("jeffreyreeves@example.org", 9);
INSERT INTO EngagedIn VALUES ("hallmatthew@example.org", 8);
INSERT INTO EngagedIn VALUES ("chris36@example.net", 1);
INSERT INTO EngagedIn VALUES ("jeffreyreeves@example.org", 10);
INSERT INTO EngagedIn VALUES ("woodgregory@example.net", 4);
INSERT INTO EngagedIn VALUES ("millerdaniel@example.com", 4);