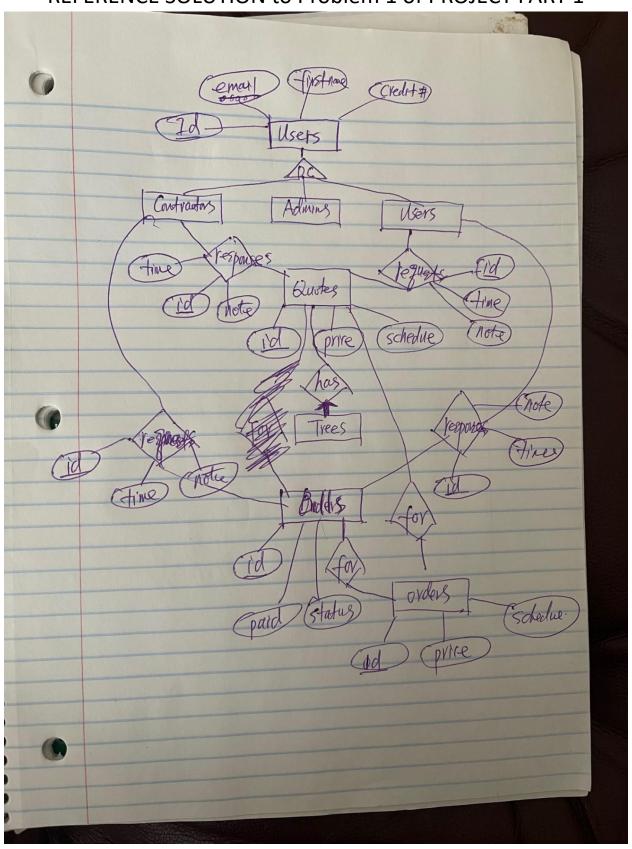
REFERENCE SOLUTION to Problem 1 of PROJECT PART 1



```
CREATE TABLE Users
(id INTEGER,
firstname VARCHAR(50),
lastname VARCHAR(50),
creditcard CHAR(16),
email VARHCAR(50),
PRIMARY KEY(id),
UNIQUE(email)
);
CREATE TABLE Quotes(
id INTEGER,
contractorid INTEGER,
clientid INTEGER,
price DOUBLE,
schedulestart DATETIME,
scheduleend DATETIME,
PRIMARY KEY(id),
FOREIGN KEY (contractorid) REFERENCES Users(id),
FOREIGN KEY (clientid) REFERENCES Users(id)
);
CREATE TABLE Trees(
id INTEGER,
quoteid INTEGER,
size DOUBLE,
```

```
height DOUBLE,
distanceFromHouse DOUBLE,
PRIMARY KEY(id),
FOREIGN KEY(quoteid) REFERENCES Quotes(id)
)
CREATE TABLE QuotesMessages(
id INTEGER,
userid INTEGER, // who sent this message, the contractor or the client?
quoteid INTEGER,
msgtime DATETIME,
price DOUBLE,
schedulestart DATETIME,
scheduleend DATETIME
note VARHCAR(200),
PRIMARY KEY(id),
FOREIGN KEY(userid) REFERENCES Users(id),
FOREIGN KEY(quoteid) REFERENCES Users(id)
);
CREATE TABLE Orders(
id INTEGER,
quoteid INTEGER,
price DOUBLE,
schedulestart DATETIME,
scheduleend DATETIME,
PRIMARY KEY(id),
FOREIGN KEY(quoteid) REFERENCES Quotes(id)
```

```
);
```

```
CREATE TABLE Bills(
id INTEGER,
orderid INTEGER,
price DOUBLE,
discount DOUBLE,
balance DOUBLE,
status VARCHAR(20), // pending, paid
PRIMARY KEY(id),
FOREIGN KEY(orderid) REFERENCES Orders(id)
);
CREATE TABLE BillsMessages(
id INTEGER,
userid INTEGER,
billid INTEGER, // who sent this message, the contractor or the client?
msgtime DATETIME,
price DOUBLE,
schedulestart DATETIME,
scheduleend DATETIME
note VARHCAR(200),
PRIMARY KEY(id),
FOREIGN KEY(userid) REFERENCES Users(id),
FOREIGN KEY(billid) REFERENCES Bills(id)
);
```