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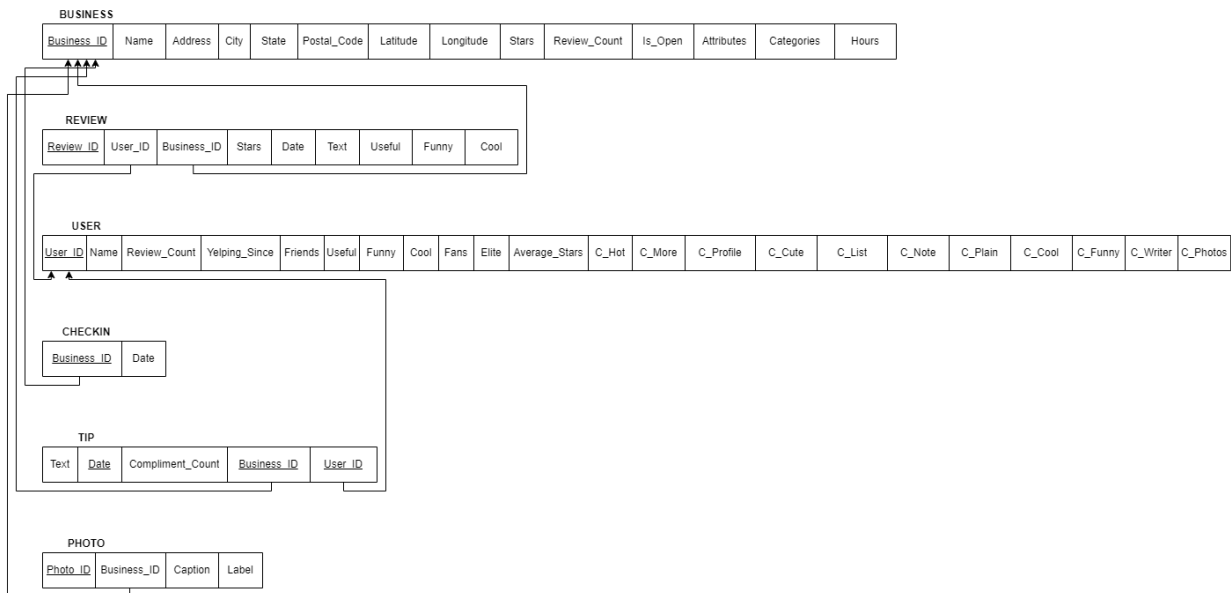
CSC 134-02

Project 2

Due: 5/8/22

1. Design a relational database schema to store such Yelp data, **with all the primary keys and foreign keys specified**. Note that you are NOT allowed to create any column which is not in the original Yelp dataset.

Hint: You may simply create one relation for each JSON file so your relational database schema will have six relations in total. In other words, **your database schema does not have to be in the first normal form**.



2. Write CREATE TABLE statements to create tables based on your relational database schema. **Declare all the primary keys and foreign keys. Declare all primary key attributes as NOT NULL to enforce entity integrity constraint.**

```

CREATE TABLE BUSINESS(
    Business_ID          CHAR(22)          NOT NULL,
    Name                 VARCHAR(32),
    Address              VARCHAR(32),
    City                 VARCHAR(32),
    State                CHAR(2),
    Postal_Code          INT,
    Latitude             FLOAT,
    Longitude            FLOAT,
    Stars                DECIMAL(2,1),
    Review_Count         INT,
    Is_Open              BOOL              NOT NULL,
    Attributes           VARCHAR(232),
    Categories           VARCHAR(64),
    Hours               VARCHAR(232),

```

PRIMARY KEY (Business_ID));

CREATE TABLE REVIEW(

Review_ID CHAR(22) **NOT NULL,**

User_ID CHAR(22) **NOT NULL,**

Business_ID CHAR(22) **NOT NULL,**

Stars DECIMAL(2,1),

Date DATE,

Text VARCHAR(456),

Useful INT,

Funny INT,

Cool INT,

PRIMARY KEY (Review_ID));

FOREIGN KEY(Business_ID) REFERENCES BUSINESS(Business_ID));

CREATE TABLE USER(

User_ID CHAR(22) **NOT NULL,**

Name VARCHAR(15),

Review_Count INT,

Yelping_Since DATE,

Friends VARCHAR(444) **NOT NULL,**

Useful INT,

Funny INT,

Cool INT,

Fans INT,

Elite VARCHAR(132),

Average_Stars DECIMAL(3,2),

Compliment_Hot INT,

Compliment_More INT,

Compliment_Profile INT,

Compliment_Cute INT,

Compliment_List INT,

Compliment_Note INT,

Compliment_Plain INT,

Compliment_Cool INT,

Compliment_Funny INT,

Compliment_Writer INT,

Compliment_Photos INT,

PRIMARY KEY (User_ID));

```
CREATE TABLE CHECKIN(  
  Business_ID          CHAR(22)          NOT NULL,  
  Date                 DATE,  
  PRIMARY KEY (Business_ID));  
FOREIGN KEY(Business_ID) REFERENCES BUSINESS(Business_ID);
```

```
CREATE TABLE TIP(  
  Text                 VARCHAR(256),  
  Date                 DATE,  
  Compliment_Count     INT,  
  Business_ID          CHAR(22)          NOT NULL,  
  User_ID              CHAR(22)          NOT NULL,  
  PRIMARY KEY (Business_ID, User_ID));  
FOREIGN KEY(Business_ID) REFERENCES BUSINESS(Business_ID);  
FOREIGN KEY(User_ID) REFERENCES USER(User_ID);
```

```
CREATE TABLE PHOTO(  
  Photo_ID             CHAR(22)          NOT NULL,  
  Business_ID          CHAR(22)          NOT NULL,  
  Caption              VARCHAR(156),  
  Label                VARCHAR(32),  
  PRIMARY KEY (Photo_ID));  
FOREIGN KEY(Business_ID) REFERENCES BUSINESS(Business_ID);
```

```
ALTER TABLE REVIEW  
ADD CONSTRAINT fk_User_ID  
FOREIGN KEY(User_ID) REFERENCES USER(User_ID);
```