

Relational Schema

```
Business(  
    Business_Id: varchar(25) [PK],  
    name: varchar(30),  
    address: varchar(65),  
    city: varchar(20),  
    state: varchar(15),  
    postal_code: int [FK to Location.postal_code],  
    latitude: float(10),  
    longitude: float(10),  
    stars: float(10),  
    review_count: int,  
    attributes: varchar(1000),  
    categories: varchar(1000),  
    monday_hours: varchar(9),  
    tuesday_hours: varchar(9),  
    wednesday_hours: varchar(9),  
    thursday_hours: varchar(9),  
    friday_hours: varchar(9),  
    saturday_hours: varchar(9),  
    sunday_hours: varchar(9)  
)
```

```
Weather_By_Zip(  
    postal_code: int [PK],  
    month: varchar(9) [PK],  
    avg_temp: float(20),  
    high_temp: float(20),  
    low_temp: float(20),  
    total_rain_inches float(10)  
)
```

```
Reviews(  
    review_id: varchar(25) [PK],  
    user_id: varchar(25) [FK to Users.user_id],  
    business_id: varchar(100) [FK to Business.Business_Id],  
    stars: int,  
    useful: int,  
    funny: int,  
    cool: int,  
    text: varchar(6000),  
    date: varchar(24)
```

)

Tips(

tip_id: int [PK], user_id: varchar(25) [FK to Users.user_id],
business_id: varchar(30),
text: varchar(3000),
date: varchar(24),
compliment_count: int

)

Users(

user_id: varchar(25) [PK],
name: varchar(30),
review_count: int,
yelping_since: varchar(24),
useful: int,
funny: int,
cool: int,
elite: int,
#don't know how this is stored
friends: int

)

```
#Login(  
#    user_id: varchar(25),  
#    username: varchar(25),  
#    password: varchar(25)  
#)
```

ER/UML Diagram

Assumptions:

- **Weather Data**
 -
- **Business**
 - Latitude and longitude uniquely identify a business. That is, we will make the simplifying assumptions that 1) two businesses do not share a location, and 2) we can disregard differences in elevation.
 - A business may have not received any reviews.
- **Reviews**
 -
- **Users**
 -
- **Compliment Count**
 -

1. Your project must involve at least 5 entities with at most one entity regarding user login information.
2. The 5 entities listed above does not include any relationship tables
3. It should involve at least two types of relationships (i.e., 1-1, 1-many, and many-many).