Weather Vault ® takes a user's location and then displays all the cities that have the same climate on that particular day. Since there are ~10,000 cities on earth, naturally, this will be a database driven site. We will need to store the daily climate of every city, which includes attributes such as each city's weather, temperature, humidity, and more. We will also need to store information about each user, including the user's id, city name and country name.

UserWeatherStatus [entity]: (Base table) stores the current weather at a user's given location.

- userID [FK, AUTO INCREMENT]

- cityHourlyForecastID [FK] (points to an instance of EveryCityHourlyForecastLog)

- Relationship: 1:M

  ○ userID -> User & UsersCity

User [entity]: represents an end user

- userID: [PK, VARCHAR, NOT NULL, AUTO INCREMENT]

- weatherStatusID [FK]

- Relationship: 1:M relationship with:

  ○ weatherStatusID -> UserWeatherStatus & UsersCity

UsersCity [entity]: represents the city where the end user is located

- userID [FK, NOT NULL]

- zipCode [VARCHAR, NOT NULL]

- addedOn [DATE]

CityWeatherForecast [entity]: stores the info about each city's hourly forecast.

- **cityHourlyForecastID [PK]**

- **zipCode [VARCHAR, NOT NULL]**

- **temp [DECIMAL, NOT NULL]**

- **feelsLike [DECIMAL, NOT NULL]**

- **windSpeedMPH [DECIMAL, NOT NULL]**

- **humidityPercentage [DECIMAL, NOT NULL]**

- **Relationship: 1:1**

    - **cityHourlyForecastID -> UserWeatherStatus**