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CS 316

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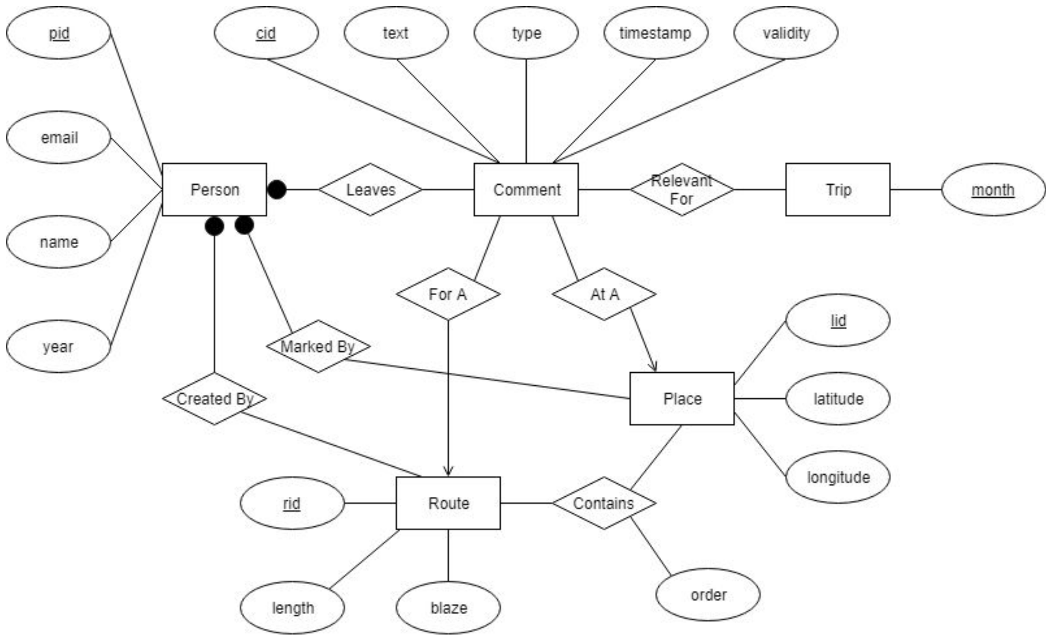
Project WILD Maps Application: Milestone 2

Alterations

We have made a few new alterations and assumptions since the last milestone. The E/R diagram and schema have changed to take feedback and new ideas into account. The new diagram and tables are shown below. Some notable changes are:

- Routes and places have been decoupled. They are very different entities, so they no longer share an “is a” relationship.
  - The author’s ID is noted for both routes and places.
  - Routes contain places in a certain order.
  - Routes and places have separate IDs.
- Trips have been slightly changed. It’s essentially a “type” attribute stored in a separate table, so users can mark which month a certain comment applies to.

These changes will allow us to handle routes more easily, both in the web application and the database. Trips are still not given their own table because of how few there are.



Updated Schema:

Person (pid, email, name, year)
Comment (cid, text, type, timestamp, validity, pid, lid, rid)
RelevantFor (cid, trip)
Place (lid, longitude, latitude, pid)
Route (rid, length, blaze, pid)
Contains (rid, lid, order)

Our Platform:

We are planning to model our platform off of the current application's site. The current site uses a Firebase database, that interacts with the Google Maps API via javascript within an HTML document. Since we will be using a Postgresql database instead of a Firebase database, we have to use php and xml where the xml doc will act as an intermediary between our database and the map. We have not yet made a successful connection between our database and our HTML file, but we are in the process of creating the php code that will allow us to make that connection.

SQL Queries:

Currently, we have queries for filtering our advice. We plan on having a sidebar next to our map that will display the comments and we will allow users to filter by a number of categories. This will be the main use of our SQL queries. Example queries are shown in test-production.sql, and their outputs in test-production.out. Queries like 2 and 3 are useful for filtering, and queries like 6 are very useful for displaying icons on the map.

Task 8 is still underway, but generally, our full production database is small enough that queries do not take very long. This is not scalable, but for now it is acceptable.