A close up of a blackboard

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**Database Layer Design - Updated**

**SWDV 691 Capstone Week 3**

I have decided to use PostgreSQL for this project because it is a relational database that has many best-in-class features for a web application project like this. It will allow me to store multiple tables that will connect in some cases to provide comprehensive and complex data to the user. Because of the nature of the website, some data is tied to a user and other data is just displayed in a way that is agnostic to a user. Additionally, I anticipate many changes to the database and many relationships to display which users created which TopTen lists, so that is why I think PostgreSQL makes the most sense.

**List of Database Tables:**

*For now, I’m just starting with these two tables which will handle and capture the TopTen data which is the heart of our web application and the user data which is central to management the website submissions, preventing spam, and allowing visitors to look at user profiles to assess the credibility of the information the user posted.*

* **Users Table** 
  + This table would hold all of the user data for my web application which would allow for authentication as well as displaying the user and city for user-generated content.
  + Fields are username/password/numberSubmissions/city/email/DateAcctCreated/profilephoto/profiledescription
  + Users would be able to create just one account, but could submit multiple times to various cities, for instance.
* **TopTen Table**
  + This table would hold the top ten submissions by city and traveler type so that users could filter and view the top ten content that is available.
  + Fields are city/username/TopTenContent/travelertype

**Entity-Relationship Diagram:**

I created this using LucidChart. Available [here](https://app.lucidchart.com/invitations/accept/821d30f2-e3ab-4309-9c86-841b6fe7bf2d) and also copied below.

The main relationship is from the username to the TopTenContent that they submitted. This is a one-to-many relationship because any top ten list would only be submitted by a single user, but a single user can submit multiple top ten lists.

I changed this for Week 3 by adding the primary key and adjusting the order for both databases so that the primary keys are both at the top. The \*\* denotes Primary Key for each table.

**A screenshot of a cell phone

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