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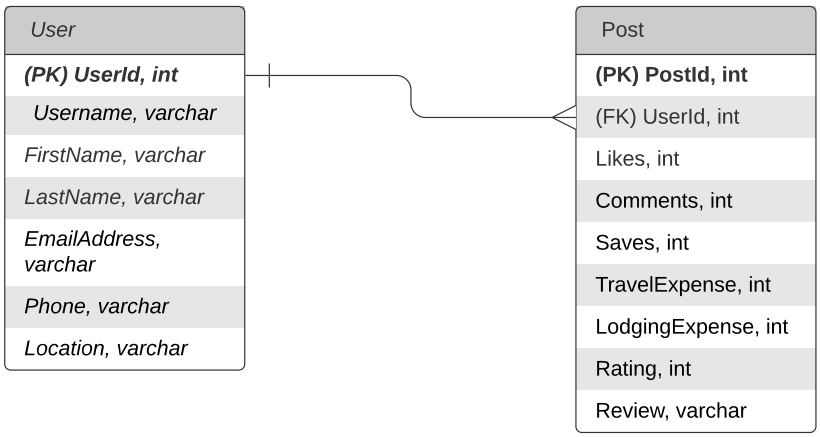
SWDV691
Week 2
Design: Database

Database Technology: *Document Database Design, MongoDB*. For this project I will be using the document database store because of the two important pieces of data: User and Post. The User and Post will be two separate entities related through a one-to-many relationship. A User can have multiple Post related through the primary key of the User entity, UserId.

Database Structures:

DBMS Diagram



JSON Structures

```
{
   "userId": 5409,
   “username”: “tomanderson”,
   "firstName": "Thomas",
   "lastName": "Andersen",
   "emailAddress ": "thomasanderson@fakenews.com",
   "phone ": "314-555-5555",
   "post": [
      {
         "postId": 143,
```

```
        "userId": 5409,
        "likes": 110,
        "comments": 7,
        "saves": 24,
        "travelExpense": 300,
        "lodgingExpense": 450,
        "rating": 4,
        "review": “Money well spent! Highly recommended.”
      }
   ],
}
```


Usage:

- User – the User collection will be used when someone goes to the website to create an account. When the account is created there will be a few pieces of required information and the ID will be randomly generated. Once all the correct information is provided the collection will be created and stored in the database. Since the information is stored in the database the user will have the ability to update the information and also delete the account. The user ID and username will both be unique.

- Post – the Post collection will be used when a registered user creates an account. A user will have to provide a few pieces of information and the ID for that particular post will be randomly generated. A user is allowed to have multiple posts and they will all be tracked based on their post ID. The user also has the capability to update and delete a post that they created. All this information will be stored in the database.