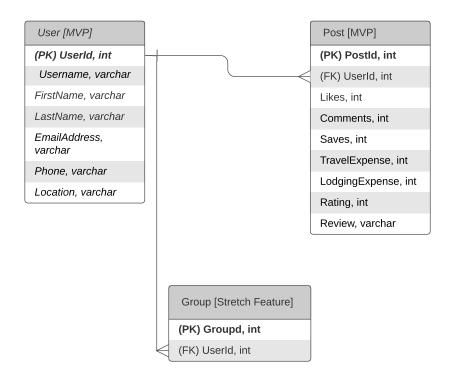
Christopher Jackson SWDV691 Week 3

Re-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. The Group schema will be used as a stretch feature.

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."
    }
  ],
 "group": [
      "groupId": 4565421353,
      "userId": 5409
  ]
}
```

Usage:

- User [MVP] 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 [MVP] 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.

• Group [Stretch Feature] — the Group collection with be used when a registered user creates a new Group message with other users. This will be where users can communicate privately on vacation plans. The purpose of this feature is to keep all communications regarding the vacation discussions/plans all in one place. All of the messages will be saved for future references when the user needs to go back and look at previous conversations. There will be a Group ID associated with each Group chat. A user can have multiple Group IDs associated with their User ID.