



Redesign: Database Design

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Changes to the Database

For my project, I will not be redesigning any portion of the database based on feedback. I believe all models/schemas fit the MVP of my application.

Overview of Database

For my application I will be utilizing MongoDB as my database. The reason that I am choosing this database is because, my data does not have enough relationships to justify using a relational database.

OneLife Travel will interact with the database through a REST API layer which is accessed by the front-end portion of the application. Every request that corresponds with data from the database will have to go through the API and there will not be any database layer in/directly accessible from the front-end portion.

Data specifications

I am utilizing the mongoose framework to create schema models for my database. I have created 3 mongoose schema models; Users, posts and comments.

User

This collection is going to be for the users. This is where the basic user data will be stored. Things like the user id, username, password and profile picture.

Document Structure:

```
{  
  
  "_id": string(this will be auto generated by mongo),  
  
  "username": string,  
  
  "password": string,  
  
  "profilePicture": string  
}
```

Posts

This collection is going to be for the posts. This is where the data for all posts will be stored.

Document Structure:

```
{  
  "_id": string(this will be auto generated by mongo),  
  
  "title": string,  
  
  "content": string,  
  
  "username": string,  
  
  "tags": [string],  
  
  "comments": [string],  
  
  "photo": string,  
  
  "likeCount": int,
```

```
  "date": Date(automatically created by mongo)
}
```

Comments

This collection is going to be for the comments. This is where the data for comments will be stored.

Document Structure:

```
{
  "_id": string(this will be auto generated by mongo),

  "username": string,

  "message": string,

  "likeCount": int,
}
```

Purpose, Implementation and Interaction

Users

Purpose:

My application revolves around a few collections, and this is one of them. This is an integral part of my application because I must add some level of personalization to each post and comment.

Implementation:

When a user successfully signs up/logs in, they will be redirected to the posts page which utilizes the data coming from the posts collection. However, in order to get to that posts page, they must authenticate in by either creating an account or logging into a valid account.

Interaction:

Users will be able create a profile based on a username and password. This is how they will log into the app for future sessions.

Posts

Purpose:

My application revolves around this collection, and this is the driving force of my app.

Implementation:

When a user successfully logs in, they will be redirected to the posts page which utilizes the data coming from this collection. Each post will be presented as a card with the user's username, created date, image and a short snippet of the content. Clicking on any of those cards will redirect the user to the individual post's page which will utilize all the information that is stored in a post document and display it to the user.

Interaction:

Users will be able to search for posts based on the post's title or tags. They can then like and comment on the individual post.

Comments

Purpose:

The purpose of this collection is that it will be presented in the post, and users can interact with the data collection by adding comments to a post

Implementation:

When a user goes to an individual post, they will be presented with comments for that specific post that is pulling from this collection. The comments will be assigned to the Post.

Interaction:

Users will be able to add comments from the individual post page.

Next Steps after MVP (Stretch Feature)

Saved Posts Model

This collection would be implemented after the MVP and will track a user's saved posts that they select. This is where the user saved post data will be stored. Things like the username, and post Id will be saved in savedPosts string array.

Document Structure:

```
{  
  
  "username": string,  
  
  "savedPosts": [string],  
  
}
```

Saved Post

Purpose:

The purpose of this collection is that it will be added after the completion of the MVP and will allow users to see their saved posts.

Implementation:

When a user clicks on their profile picture they will see a drop down for saved posts, they will be presented with all their saved posts if they click on the button.

Interaction:

Users will be able to save/delete/get saved posts.