Data Overview:

I will be using Cloud Firestore to hold data and keep it persistent while running the web application. Cloud Firestore also provides free cloud hosting, which keeps costs down and allows me to easily scale based on my needs throughout the project and after the class if I decide to publish the site. The database will interact with the web application through the REST API layer built by Ionic and Angular to change or retrieve things as necessary. This prevents the database layer from being on the front end.

Users

This collection will simply hold the user's username and password. This will be used for a very basic login interaction for MVP purposes. I need the usernames to exist so that I can allow a singular user to edit their posts otherwise, it would not be possible to edit posts, or every user would be able to edit them, both options being unfavorable for my project. The username also allows me to have users save specific posts and link them to their accounts.

Document Structure:

{
"username": string (primary key)
"password": string
}

Bracelet Designs

This collection will simply hold the properties of a bracelet design, marked by an auto-generated id. The unique id allows users to name the bracelet whatever they want without having to worry about a unique name. This allows me to link the bracelets to users' accounts and not worry about retrieving the wrong bracelet with the same name. All of the data will be supplied by the form to create designs, with the username and id being automatically supplied.

Document Structure:

{
“BraceletId”: int (generated by mongo db primary key),
"username": string (foreign key),
“name”: string,
“description”: long string,
“beadtype”: string,
“colors”: string,
“letters”: string,
“strands”: int,
“tags”: string
}