Fire Base

Robert Grad

Creative objective section:

The features from Firebase that i included in this project were using an Email/Password user sign-in provider, sending data to a FireStore database, and using the onSnapshot() function to reflect database changes in the UI of the website. This project was done on my own without any partners.

Link to hosted site: <https://firebase-gtk-web-start-bjghg8.stackblitz.io/>

Link to github: <https://github.com/rgrad/FireBaseProject>

Slideshow link: <https://github.com/rgrad/FireBaseProject/blob/main/Firebase.pdf>

Video link: <https://github.com/rgrad/FireBaseProject/blob/main/website%20demo_default.mp4>

Tech summary section:

The initial Goal of this project at first was to simply create a site that was able to communicate with a fireStore database as well as format that database. After i started learning more about firebase i realized that my initial idea was under-scoped. I decided that i would be able to add in user authentication as wells as use the real-time features of firestore to alter elements of the site in real time.

This project relies on the node packages firebase, firebase/auth, firebase/firestore, firebaseui, and initializeApp .

| import {  getAuth,  EmailAuthProvider,   signOut,  onAuthStateChanged } from 'firebase/auth'; import {  getFirestore,  addDoc,  collection,  query,  orderBy,  onSnapshot } from 'firebase/firestore';  import \* as firebaseui from 'firebaseui'; |
| --- |

These packages were downloaded via Node Package manager.

In this project the most important code in my javaScript was utilizing the initializeApp function listed above.

| const firebaseConfig = {  apiKey: "AIzaSyDM297uhmHoo6apZjjnHLbY\_xOw3CiT2Oc",  authDomain: "fir-web-codelab-603d5.firebaseapp.com",  projectId: "fir-web-codelab-603d5",  storageBucket: "fir-web-codelab-603d5.appspot.com",  messagingSenderId: "66141481493",  appId: "1:66141481493:web:a65de9a197b8a5ed0dbc1c",  measurementId: "G-RXBCL3TL0Z"  };   initializeApp(firebaseConfig); |
| --- |

In this section of code i am using the FireBase config information that is generated on the FireBase dashboard when you create a new project. This firebaseConfig variable is what is used to create the connection between my application and the firebase project.

Member notes:

I was The only member of my group and as such I did all of the work on this project. I didn't have any structure for assigning myself goals or tasks. Without there being another group member for me to collaborate with, i didn't feel the need to keep to a rigid structure. I was confident that what i had decided to do was well within my capabilities as long as i kept to task and didn't put off what i needed to do.

In the beginning stages of developing my project, i experienced many difficulties in getting relevant information on learning how to use Firebase. When we first needed to sign up for a topic, i found a video from a few years ago talking about Firebase (<https://www.youtube.com/watch?v=vAoB4VbhRzM&t=3s>). I looked more into their content and found that they had a large number of videos aimed at getting people started in Firebase. After a few hours of troubleshooting, I checked the comments to see if anyone was having the same issues as I was. It was here that I found that Firebase had gone through some major overhauls that rendered this video instruction almost useless. This was a problem that I would continue to face in the early stages of development. As I found out, Firebase regularly goes through updates that can completely change the way that you have to set up for database and configuration information to connect to Firestore. Only when I found an article directly from Firebase that was released 7 months ago detailing changes to Firestore before I could make any headway. In hindsight, I would have sought out the most recent information first and have worked my way backward from there if I wanted more. This is the first time that I have had to interact with a service that was so radically changed on a semi-regular basis. It has taught me to be more discerning with where I get my information so that i do not waste time on outdated instructions. In conclusion, this was a very fun project to work on. It was interesting to work with tools that are so commonplace within the industry and I think that alone was valuable. As mentioned earlier, I re-scoped the project after believing that my initial plan was too simple. I think that this was also a valuable experience as it showed that I am good at judging the amount of work that I can reasonably take on.

Sources:

Fireship. (2022, February 17). *Firebase in 100 seconds* [Video]. YouTube. <https://www.youtube.com/watch?v=vAoB4VbhRzM>

*Build documentation*. (n.d.). Firebase. <https://firebase.google.com/docs/build>

<https://firebase.google.com/docs/reference/js/firestore_>

Firebase. (2023, April 27). *Getting started with Firebase on the Web* [Video]. YouTube. https://www.youtube.com/watch?v=ILTo8IvFXJw