

1. Firebase web application

- No screenshots or observations

2. Project setup

- No screenshots or observations

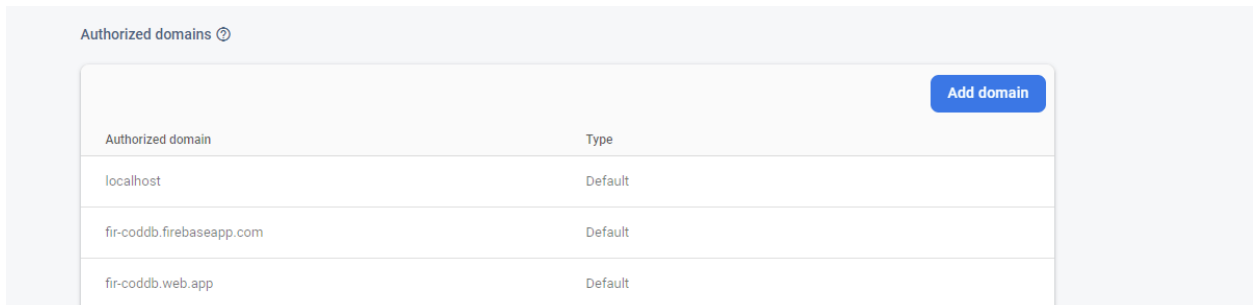
3. Application setup

- No screenshots or observations

4. Authentication setup

Answer the following questions for your lab notebook

- What other domains are given access to this Firebase project by default?



Authorized domains ⓘ

Authorized domain	Type
localhost	Default
fir-coddb.firebaseio.com	Default
fir-coddb.web.app	Default

Add domain

5. Database setup

- No screenshots or observations

6. Storage setup

- No screenshots or observations

7. CLI setup

- No screenshots or observations

8. HTML code

Answer the following for your lab notebook:

- Which version of Firebase does this application use?
 - Firebase 8.2.9

9. Test application

Answer the following questions:

- What are the values for databaseURL, storageBucket, and authDomain that the client application is configured with?
 - Database url doesn't seem to be a thing

```
var firebaseConfig = {
  "projectId": "fir-coddb",
  "appId": "1:217328432403:web:462ed0ae2efdde1841d6e6",
  "storageBucket": "fir-coddb.appspot.com",
  "locationId": "us-central",
  "apiKey": "AIzaSyBB8F20MDZPNiEEDGjRjBLvYeJE5l19ph8",
  "authDomain": "fir-coddb.firebaseio.com",
  "messagingSenderId": "217328432403"
};
```

10. Add authentication

View the code and answer the following questions for your lab notebook:

- **What missing functions deal with user authentication?**
 - `signin()`, `signout()`, `isusersingedin()`
- **What missing functions deal with sending and receiving messages?**
 - `savemessage()`, `loadmessage()`, `saveimagemessage()`

11. Update UI

Answer the following questions:

- What are the names of the elements that are hidden when the user is signed out?

```
} else { // User is signed out!
  // Hide user's profile and sign-out button.
  userNameElement.setAttribute('hidden', 'true');
  userPicElement.setAttribute('hidden', 'true');
  signOutButtonElement.setAttribute('hidden', 'true');
```

- What is the name of the element that is not hidden when the user is signed out?

```
// Show sign-in button.
signInButtonElement.removeAttribute('hidden');
```

12. Test application with authentication

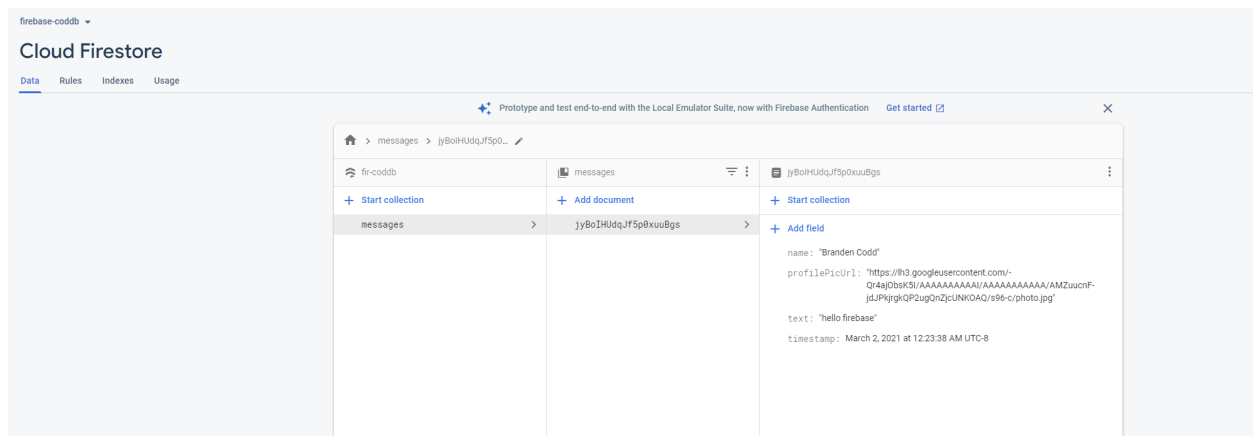
- No screenshots or observations

13. Add text messaging

- No screenshots or observations

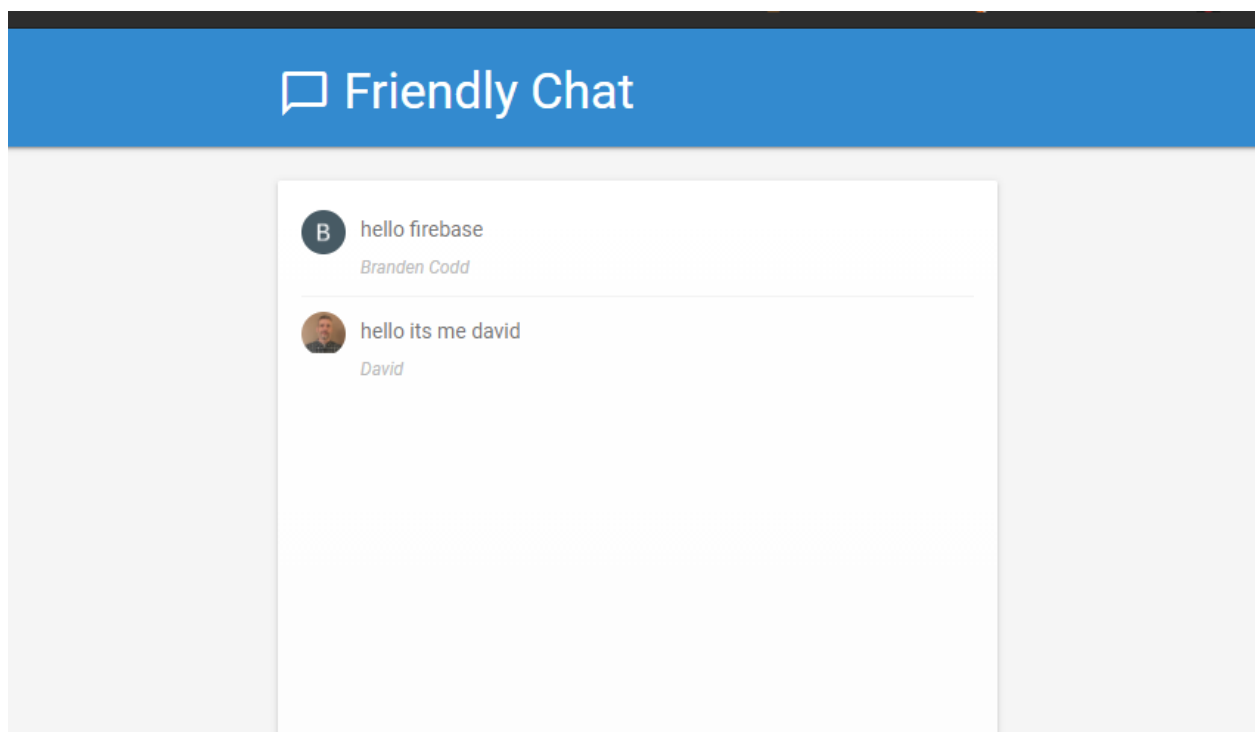
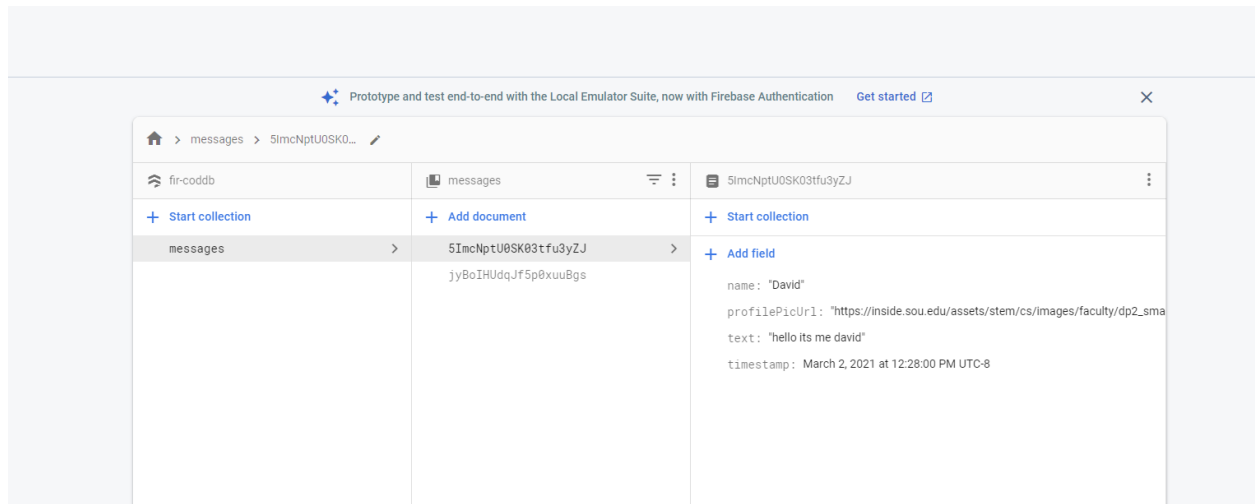
14. Test application with text messaging

- Include a screenshot of the message and its fields in the database for your lab notebook



15. Manual message insertion

- Include a screenshot of the application with its two messages for your lab notebook



16. Add image messaging

In examining the code, answer the following question for you lab notebook:

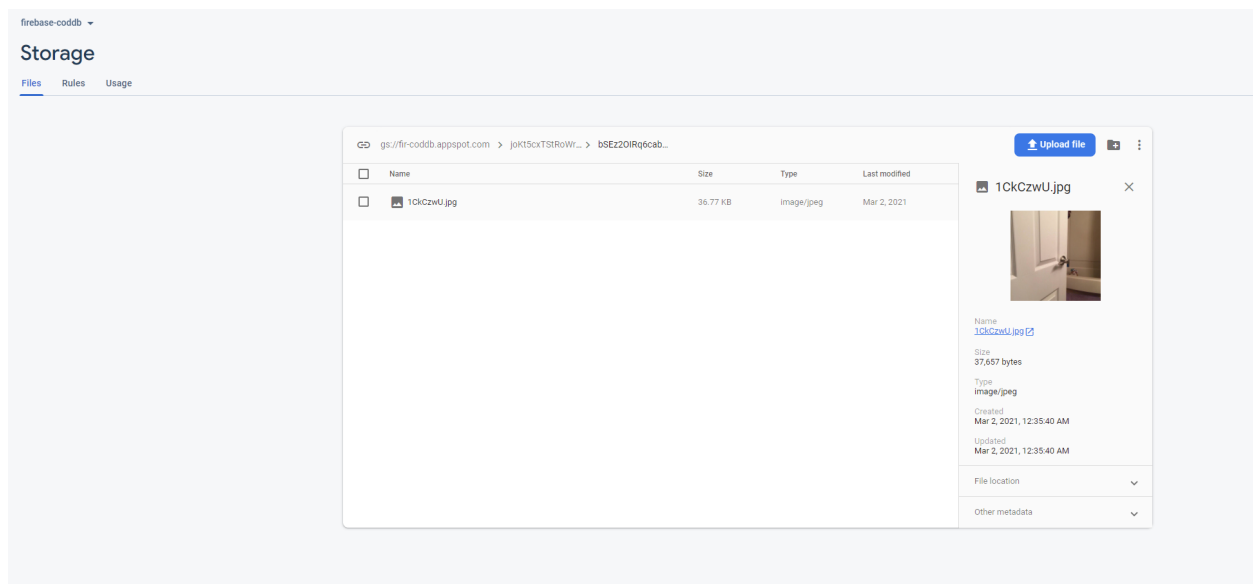
- What is the URL of the image that is first shown in the UI as the message is loading?
 - <https://www.google.com/images/spin-32.gif?a>

17. Test application with image messaging

Answer the following questions:

- **How do the fields in an image document differ from that of the text document?**
 - Images have different fields, for example
 - imageUrl
 - storageUri
 - No text field
- **What URL and storage location can the image be found at?**
 - **Url:**
["https://firebasestorage.googleapis.com/v0/b/fir-coddb.appspot.com/o/joKt5cxTStRoWrzGnyPdIUptOdo1%2FbSEz2OIRq6cabCOFz0XL%2F1CkCzwU.jpg?alt=media&token=c2aebd5-4e4b-4d41-b99c-0b538d6bf71b"](https://firebasestorage.googleapis.com/v0/b/fir-coddb.appspot.com/o/joKt5cxTStRoWrzGnyPdIUptOdo1%2FbSEz2OIRq6cabCOFz0XL%2F1CkCzwU.jpg?alt=media&token=c2aebd5-4e4b-4d41-b99c-0b538d6bf71b)
 - **Storage location:**
joKt5cxTStRoWrzGnyPdIUptOdo1/bSEz2OIRq6cabCOFz0XL/1CkCzwU.jpg

Visit the "Storage" section in the Firebase console and take a screenshot of the image in the storage bucket for your lab notebook.



18. Deploy application

Answer the following questions:

- **What directory is the application going to be served from?**
 - web-start
- **What does the Cache-Control setting configured for the HTML and Javascript files do?**
 - holds directives (instructions) for caching in both requests and responses. A given directive in a request does not mean the same directive should be in the response.

Take a screenshot of the message including the URL for your lab notebook.

