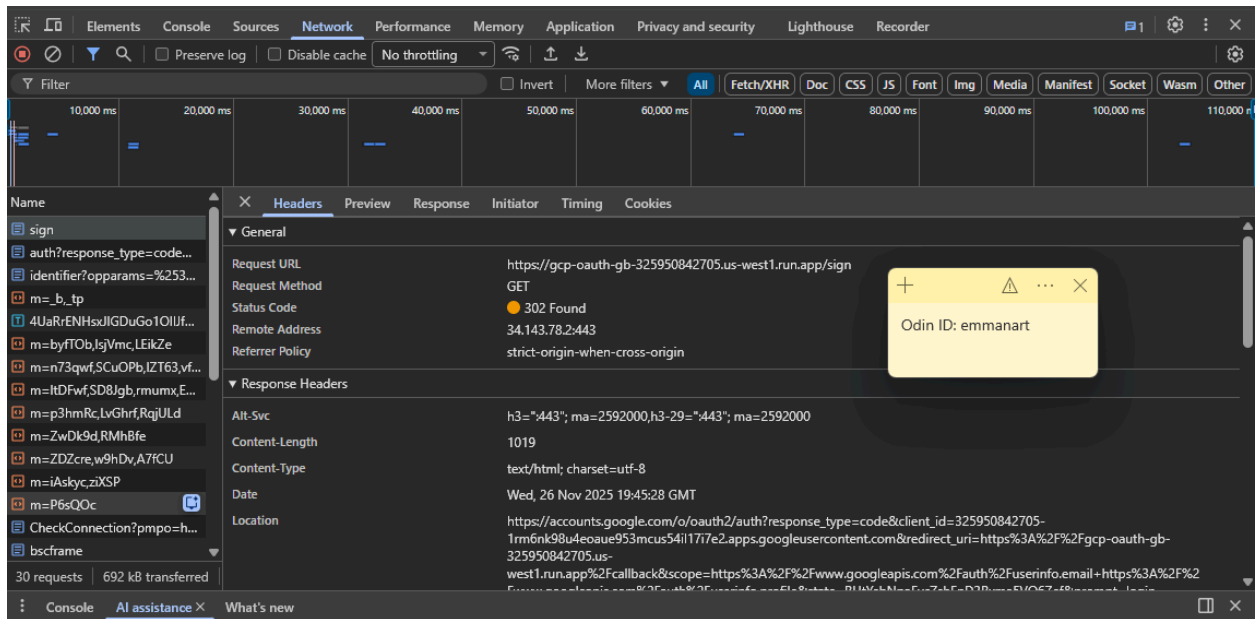
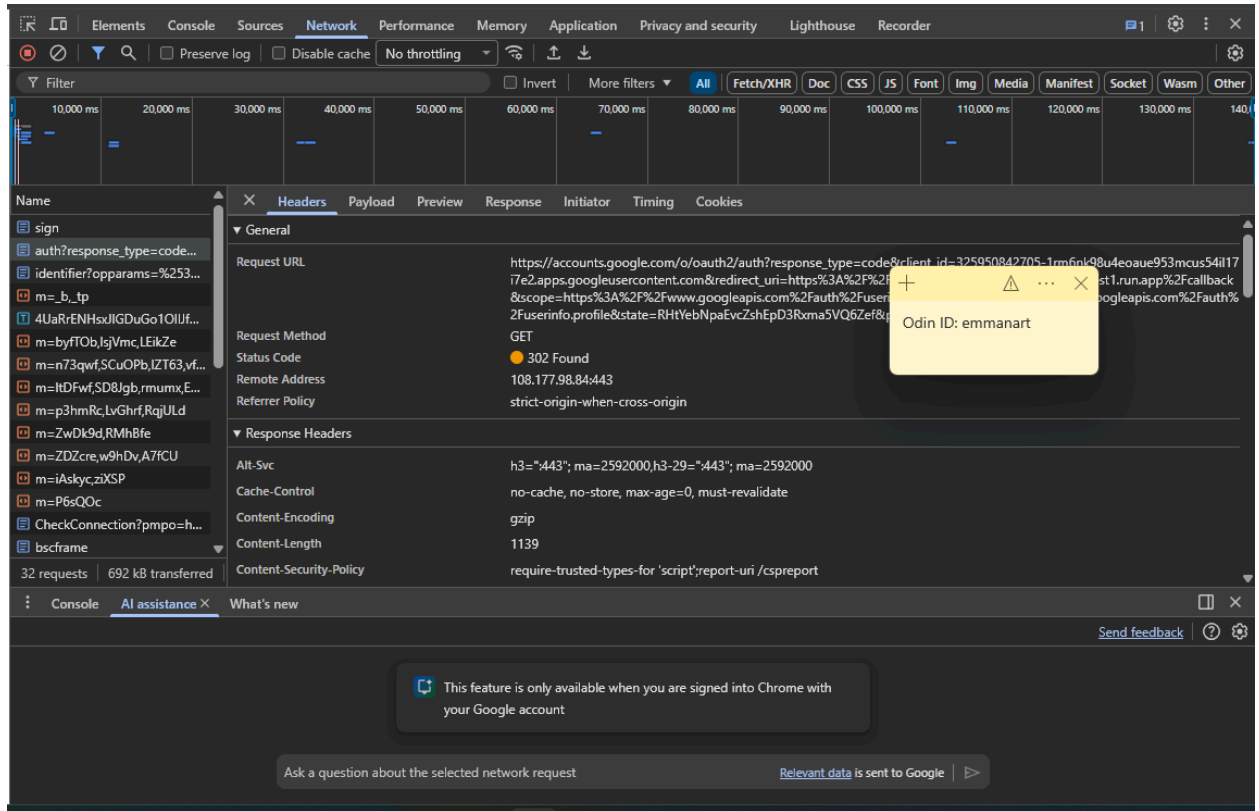


Lab 9.1g

- Take a screenshot of the Headers that includes the URL and the returned HTTP status code for the first two requests for your lab notebook.







- Based on the description of the source code, what lines of code in our application are responsible for the second request shown?
- Take a screenshot of the permissions you (as a user) are granting the Guestbook access to.

Sign in to gcp-oauth-gb-325950842705.us-west1.run.app

 emmanart@pdx.edu ▼

Google will allow gcp-oauth-gb-325950842705.us-west1.run.app to access this info about you

 Emmanuel Arthur
Name and profile picture

 emmanart@pdx.edu
Email address

+ ⚠️ ... ✕

Odin ID: emmanart

Review gcp-oauth-gb-325950842705.us-west1.run.app's Privacy Policy and Terms of Service to understand how gcp-oauth-gb-325950842705.us-west1.run.app will process and protect your data.

To make changes at any time, go to your [Google Account](#).

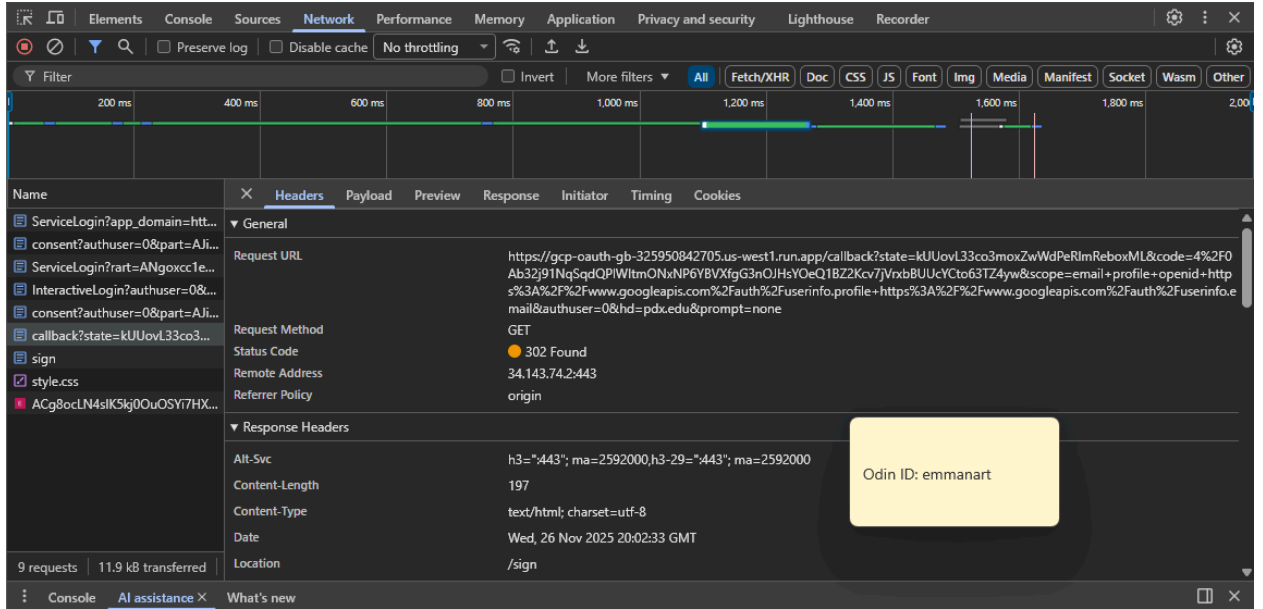
Learn more about [Sign in with Google](#).

Cancel

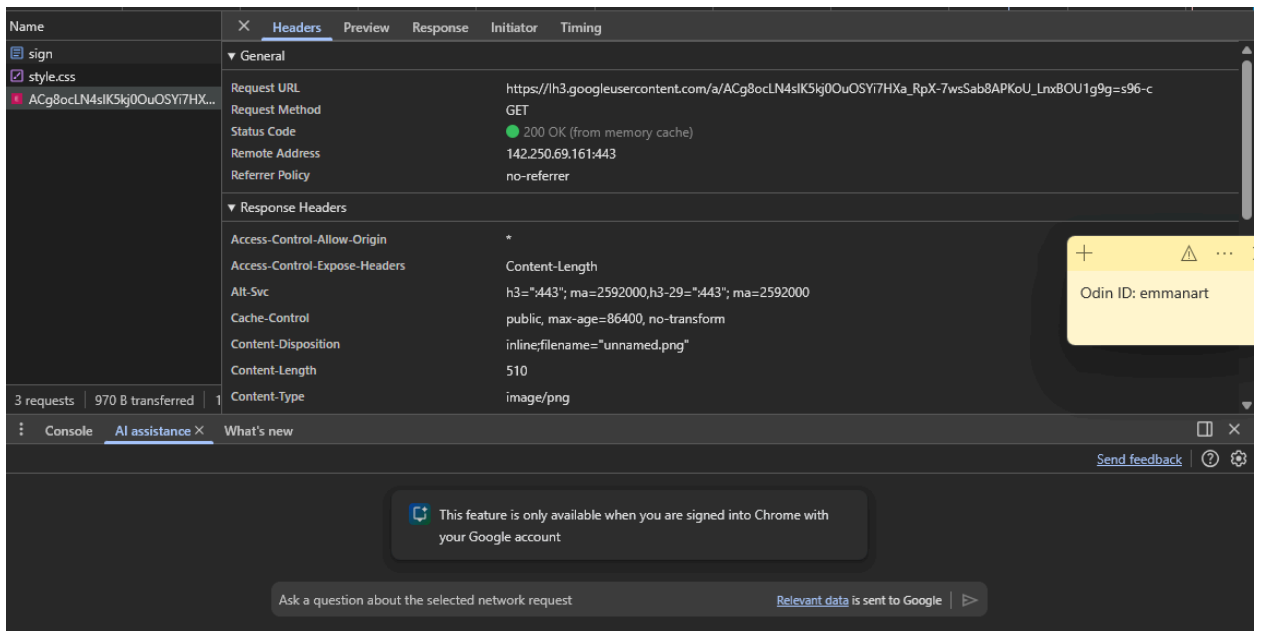
Continue

- Take a screenshot of the Headers that includes the entire Callback URL and its returned HTTP status code. What is the URI for the Location that the User sent to by the Callback?




The URI for the location is <https://gcp-oauth-gb-325950842705.us-west1.run.app/sign>



- Find the request within Developer Tools that fetches the embedded image and take a screenshot of its URL.




- Take a screenshot showing multiple authenticated accounts have been able to sign the Guestbook.


 (24) "software engin...  (25) "software engin...  Software Developer...

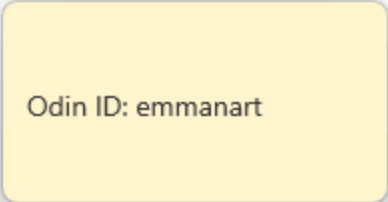
Guestbook

[Sign here](#) | [Logout](#)


Entries

 Emmanuel Arthur <emmanart@pdx.edu>
on 2025-11-26 20:01:58.578065+00:00
Hello OAuth Guest!

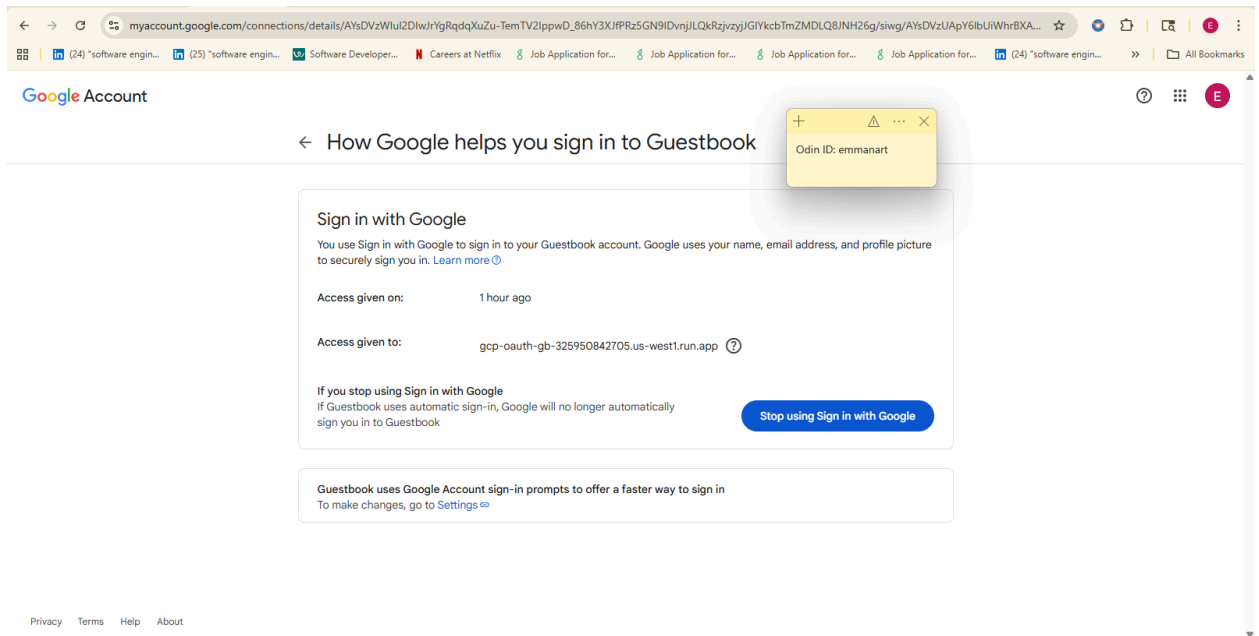
 Emmanuel Arthur <emmakarthur1800@gmail.com>
on 2025-11-26 20:34:35.369129+00:00
Hello OAuth Guestbook from different account!



Odin ID: emmanart

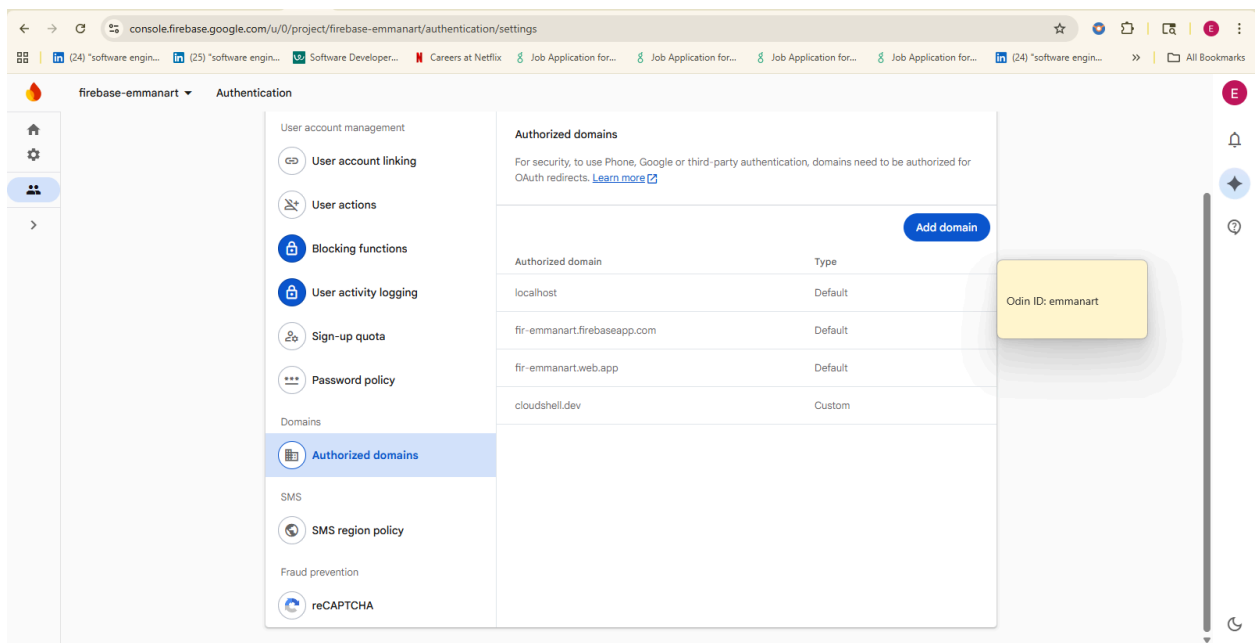


- Take a screenshot of the expanded information that includes your OdinId for your lab notebook.



Lab9.2g

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



From the above they are localhost, fir-emmanart.firebaseio.com, fir-emmanart.web.app

- Take a screenshot of the first 10 lines of the produced file.

```

✓ Enter authorization code: 4/0Ab32j90dGNsNLsairHUt62iVOuyi5yvU6AyJZZu16jxkzp22ZU0Jt_CJYyDElqS63uLVA
✓ Success! Logged in as emmanart@pdx.edu
emmanart@cloudshell:~ (firebase-emmanart)$ cd codelab-friendlychat-web/web-start
emmanart@cloudshell:~/codelab-friendlychat-web/web-start (firebase-emmanart)$ firebase use --add
✓ Which project do you want to add? firebase-emmanart
✓ What alias do you want to use for this project? (e.g. staging) default
Created alias default for firebase-emmanart.
Now using alias default (firebase-emmanart)
emmanart@cloudshell:~/codelab-friendlychat-web/web-start (firebase-emmanart)$ ls
firebase.json  node_modules  package.json  package-lock.json  public  README.md  src  webpack.config.js
emmanart@cloudshell:~/codelab-friendlychat-web/web-start (firebase-emmanart)$ cd src
emmanart@cloudshell:~/codelab-friendlychat-web/web-start/src (firebase-emmanart)$ ls
firebase-config.js  firebase-messaging-sw.js  index.js
emmanart@cloudshell:~/codelab-friendlychat-web/web-start/src (firebase-emmanart)$ cd ..
emmanart@cloudshell:~/codelab-friendlychat-web/web-start (firebase-emmanart)$ head -n 10 public/scripts/main.js
/*
 * ATTENTION: An "eval-source-map" devtool has been used.
 * This devtool is neither made for production nor for readable output files.
 * It uses "eval()" calls to create a separate source file with attached SourceMaps in the browser devtools.
 * If you are trying to read the output file, select a different devtool (https://webpack.js.org/configuration/devtool/)
 * or disable the default devtool with "devtool: false".
 * If you are looking for production-ready output files, see mode: "production" (https://webpack.js.org/configuration/mode/).
 */
/******/ (() => { // webpackBootstrap
/******/   "use strict";
emmanart@cloudshell:~/codelab-friendlychat-web/web-start (firebase-emmanart)$

```

Odin ID: emmanart

- What missing functions deal with user authentication?

Below are the functions that have to do with user authentication directly from the code:

```
// Signs-in Friendly Chat.
```

```
async function signIn() {
```

```
    alert('TODO: Implement Google Sign-In');
```

```
    // TODO 1: Sign in Firebase with credential from the Google user.
```

```
}
```

```
// Signs-out of Friendly Chat.
```

```
function signOutUser() {
```

```
    // TODO 2: Sign out of Firebase.
```

```
}
```

```
// Initiate firebase auth

function initFirebaseAuth() {

    // TODO 3: Subscribe to the user's signed-in status

}


// Returns the signed-in user's profile Pic URL.

function getProfilePicUrl() {

    // TODO 4: Return the user's profile pic URL.

}


// Returns the signed-in user's display name.

function getUsername() {

    // TODO 5: Return the user's display name.

}


// Returns true if a user is signed-in.

function isUserSignedIn() {

    // TODO 6: Return true if a user is signed-in.

}
```


- What missing functions deal with sending and receiving messages?

These are the functions below

```
// Saves a new message on the Cloud Firestore.

async function saveMessage(messageText) {

    // TODO 7: Push a new message to Cloud Firestore.

}

// Loads chat messages history and listens for upcoming ones.

function loadMessages() {

    // TODO 8: Load and listen for new messages.

}

// Saves a new message containing an image in Firebase.

// This first saves the image in Firebase storage.

async function saveImageMessage(file) {

    // TODO 9: Posts a new image as a message.

}

// Saves the messaging device token to Cloud Firestore.

async function saveMessagingDeviceToken() {
```

```
    // TODO 10: Save the device token in Cloud Firestore

}

// Requests permissions to show notifications.

async function requestNotificationsPermissions() {

    // TODO 11: Request permissions to send notifications.

}
```

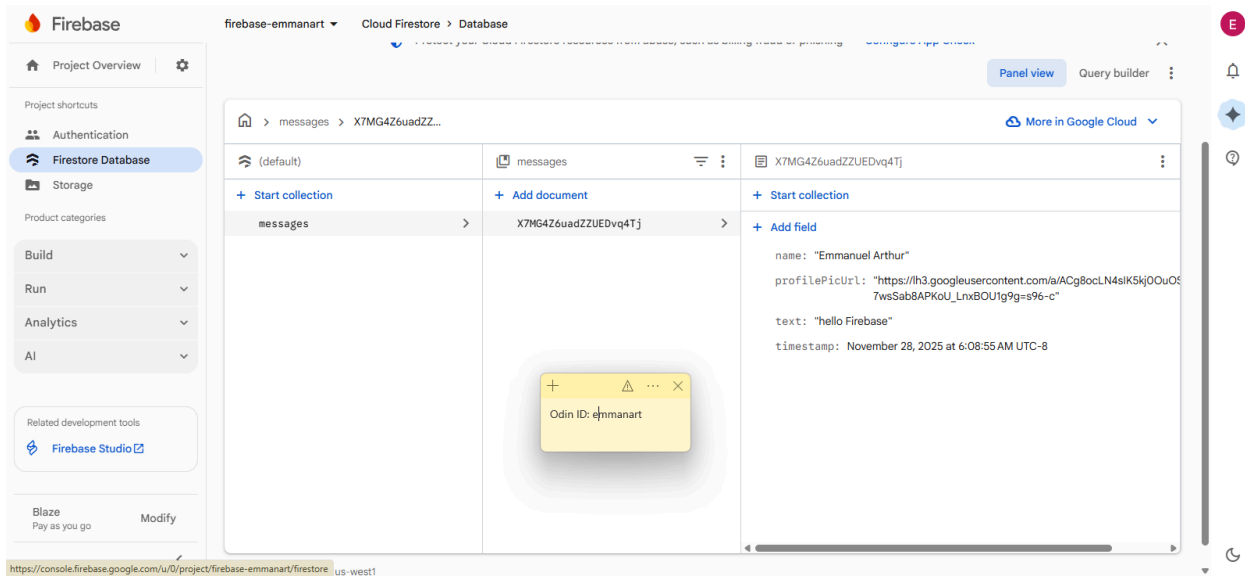
- What are the names of the elements that are hidden when the user is signed out?

userNameElement, userPicElement, signOutButtonElement

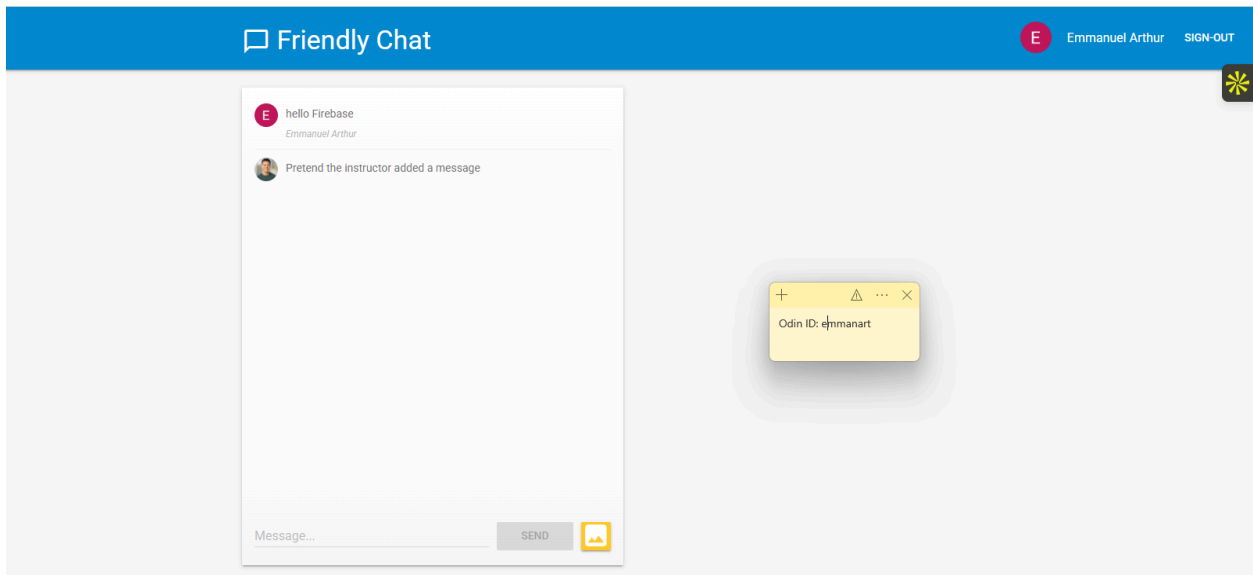
- What is the name of the element that is not hidden when the user is signed out?

signInButtonElement

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



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



- What is the URL of the image that is first shown in the UI as the message is loading?

It's '<https://www.google.com/images/spin-32.gif?a>' from the variable which is declared as `var LOADING_IMAGE_URL =`
`'https://www.google.com/images/spin-32.gif?a';`

- How do the fields in an image document differ from that of the text document?

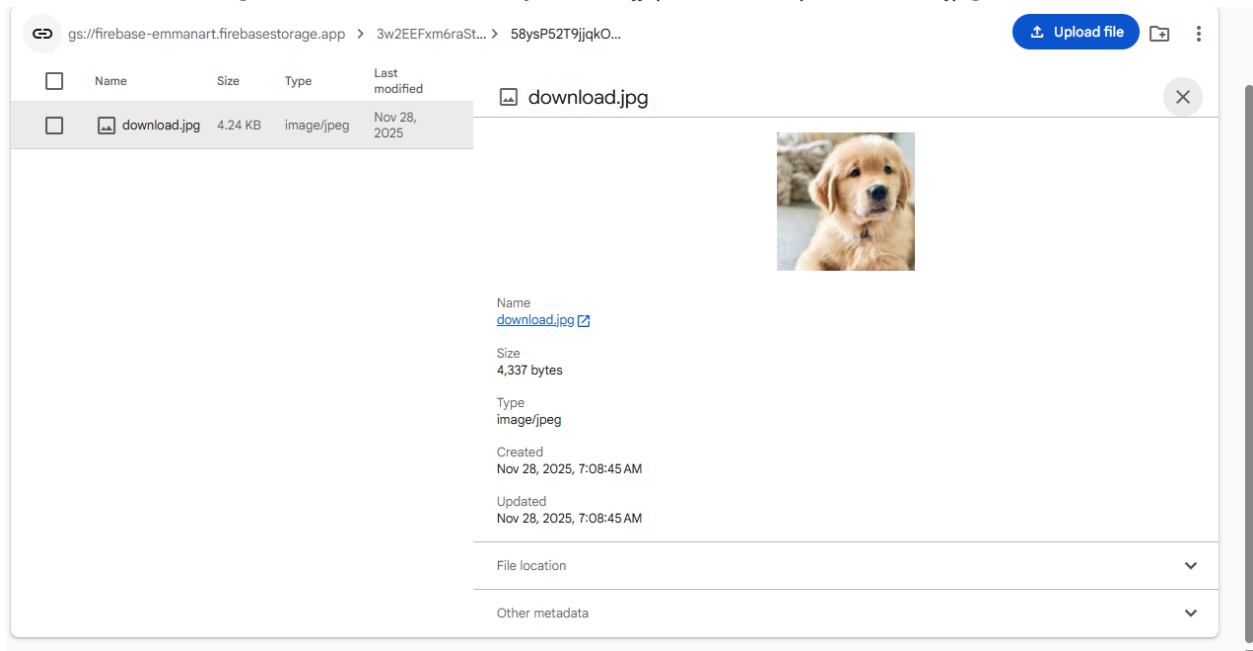
The image document has an imageUrl field and a storage uri field

- What URL and storage location can the image be found at?

URL:

<https://firebasestorage.googleapis.com/v0/b/firebase-emmanart.firebaseio.com/o/3w2EEFxm6raStxgxZOuoWb5w3EU2%2F58ysP52T9jjqkO5LmN4q%2Fdownload.jpg?alt=media&token=179361e6-9179-4c54-aaa8-e31dd27696e4>" and Storage Location is

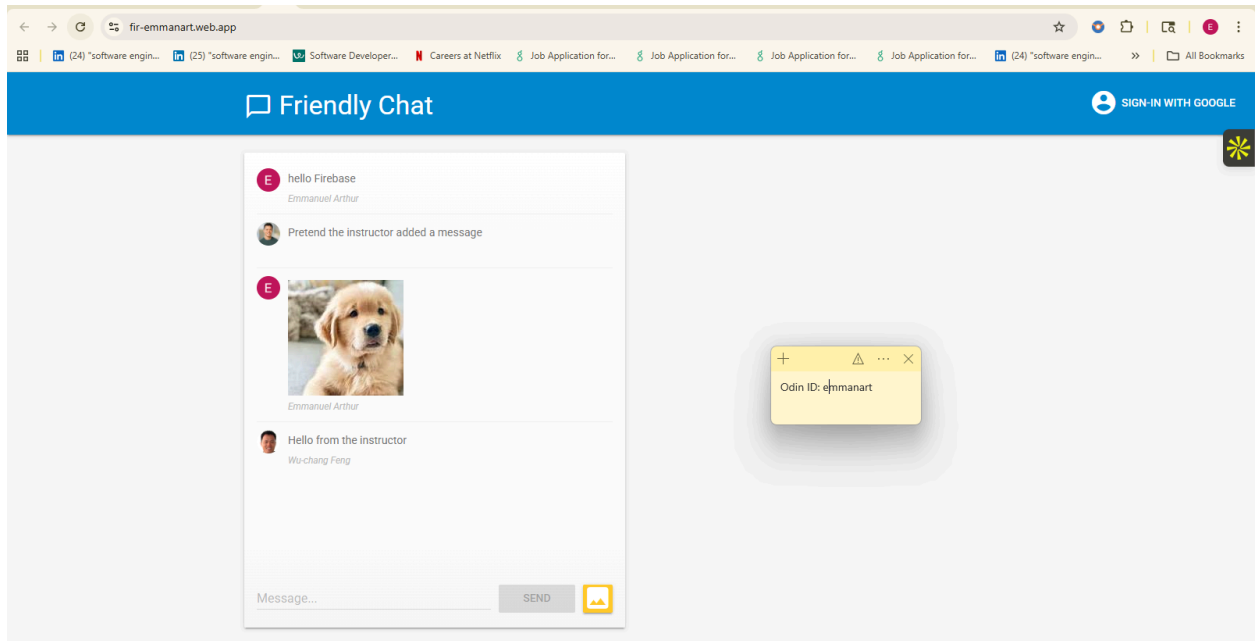
"3w2EEFxm6raStxgxZOuoWb5w3EU2/58ysP52T9jjqkO5LmN4q/download.jpg"



- What directory is the application going to be served from?

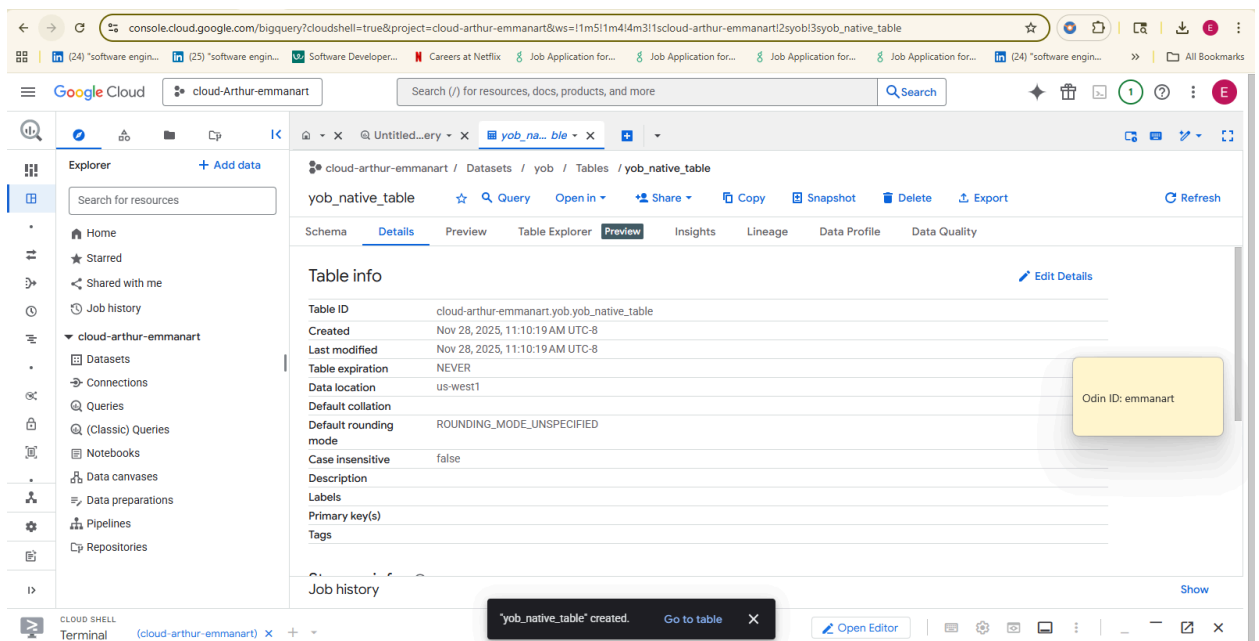
The public folder

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



Lab 9.3g

- Take a screenshot of the table's details that includes the number of rows in the table.



- Screenshot the query results and include it in your lab notebook

The screenshot shows the Google Cloud BigQuery console. The left sidebar contains the Explorer panel with a search bar and navigation links. The main panel displays an 'Untitled query' editor with a SQL query and its results. A yellow tooltip shows the 'Odin ID: emmanart'. The query results are displayed in a table with 7 rows and 2 columns: 'name' and 'count'.

Query completed
Using on-demand processing quota

Query results

Job information Results Visualization JSON Execution details Execution graph

Row	name	count
1	Emma	20799
2	Olivia	19674
3	Sophia	18490
4	Isabella	16950
5	Ava	15586
6	Mia	13442
7	Emily	12562

Results per page: 50 1 - 20 of 20

Job history

- Screenshot your results and include it in your lab notebook

(cloud-arthur-emmanart) x + Editor

Gemini CLI is available in Cloud Shell terminal! Type `gemini` to try it. [Learn m...](#) Don't show again Dismiss

```
2025-11-28 18:53:54 (10.3 MB/s) - 'yob2014.csv' saved [425485/425485]

emmanart@cloudshell:~ (cloud-arthur-emmanart)$
emmanart@cloudshell:~ (cloud-arthur-emmanart)$ head -3 yob2014.csv
wc -l yob2014.csv
Emma,F,20799
Olivia,F,19674
Sophia,F,18490
33044 yob2014.csv
emmanart@cloudshell:~ (cloud-arthur-emmanart)$ bq query "SELECT name, count FROM [wuchang.yob.yob_native_table] WHERE gender='M' ORDER BY count ASC LIMIT 10"
BigQuery error in query operation: Error processing job 'cloud-arthur-emmanart: bqjob_r747098e1ee79acc9_0000019acbe948c4_1': Access Denied: Table wuchang:yob.yob_native_table: User does not have permission to query table wuchang:yob.yob_native_table, or perhaps it does not exist.
emmanart@cloudshell:~ (cloud-arthur-emmanart)$ bq query "SELECT name, count FROM [cloud-arthur-emmanart.yob.yob_native_table] WHERE gender='M' ORDER BY count ASC LIMIT 10"

+-----+-----+
| name | count |
+-----+-----+
| Aari | 5 |
| Aaliyah | 5 |
| Aadian | 5 |
| Aaroh | 5 |
| Aarit | 5 |
| Aativ | 5 |
| Aadhi | 5 |
| Aarohan | 5 |
| Aariyan | 5 |
| Aamer | 5 |
+-----+-----+

emmanart@cloudshell:~ (cloud-arthur-emmanart)$
emmanart@cloudshell:~ (cloud-arthur-emmanart)$
```

+ ⚠ ... ✕

Odin ID: emmanart

- Screenshot your results and include it in your lab notebook

```
emmanart@cloudshell:~ (cloud-arthur-emmanart)$ bq shell
Welcome to BigQuery! (Type help for more information.)
cloud-arthur-emmanart> SELECT name, count FROM [cloud-arthur-emmanart.yob.yob_native_table] WHERE gender='M' ORDER BY count ASC LIMIT 10
+-----+-----+
| name | count |
+-----+-----+
| Aari | 5 |
| Aaliyah | 5 |
| Aadian | 5 |
| Aaroh | 5 |
| Aarit | 5 |
| Aativ | 5 |
| Aadhi | 5 |
| Aarohan | 5 |
| Aariyan | 5 |
| Aamer | 5 |
+-----+-----+
cloud-arthur-emmanart>
```

+ ⚠ ... ✕

Odin ID: emmanart

- Screenshot your results and include it in your lab notebook

```
cloud-arthur-emmanart> SELECT name, count FROM [cloud-arthur-emmanart.yob.yob_native_table] WHERE name='Emmanuel' ORDER BY count ASC LIMIT 10
```

name	count
Emmanuel	8
Emmanuel	2548

```
cloud-arthur-emmanart>
```

+ ⚠️ ... ✕
 Odin ID: emmanart

- Screenshot the query results and include it in your lab notebook

us-west-2
yob_big...ble
*Untitled...ery

Untitled query
Run Save Download Share Schedule Open in More

```
1 SELECT name, count
2 FROM `cloud-arthur-emmanart.yob.yob_biglake_table`
3 WHERE gender = 'F'
4 ORDER BY count DESC
5 LIMIT 20
```

Odin ID: emmanart

Query completed

Query results
Save results Open in

Job information
Results
Visualization
JSON
Execution details
Execution graph

Row	name	count
1	Emma	20799
2	Olivia	19674
3	Sophia	18490
4	Isabella	16950
5	Ava	15586

Results per page: 50
1 - 20 of 20
< >

Job history
Show

Lab 9.4g

- How much less data does this query process compared to the size of the table?

The more filtered query has 18.89 GB less data compared to the size of the table.

- How many twins were born during this time range?

375362

- How much lighter on average are they compared to single babies?

About 2.18 (difference) units lighter and 1.42 (ratio) times lighter

- Show the plots generated for the two most important features for your lab notebook

- What day saw the largest spike in trips to grocery and pharmacy stores?

2020-03-13

- On the day the stay-at-home order took effect (3/23/2020), what was the total impact on workplace trips?

Workplace trips reduced by 49

- Which three airports were impacted the most in April 2020 (the month when lockdowns became widespread)?

Daniel K. Inouye International, Chicago OHare International, Miami International

- Run the query again using the month of August 2020. Which three airports were impacted the most?

Newark Liberty International, Daniel K. Inouye International, Charlotte Douglas International

- What table and columns identify the place name, the starting date, and the number of excess deaths from COVID-19?

The table ID is excess_deaths and the columns are: placename, start_date, end_date, excess_deaths

- What table and columns identify the date, county, and deaths from COVID-19?

The table ID is us_counties and the columns are date, county and deaths

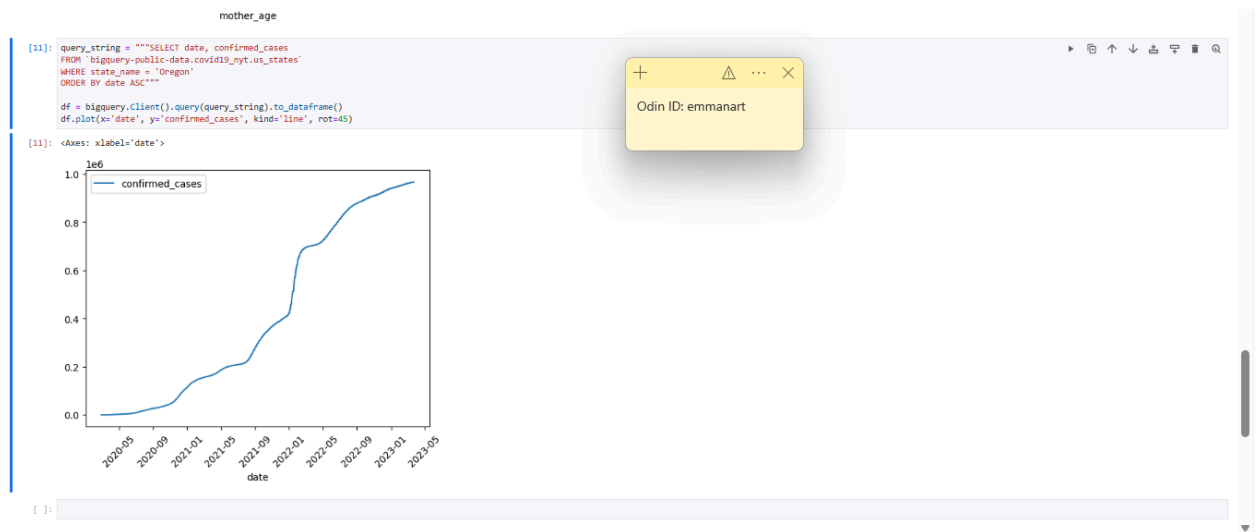
- What table and columns identify the date, state, and confirmed cases of COVID-19?

The table ID is us_states and the columns are date, state_name, confirmed_cases

- What table and columns identify a county code and the percentage of its residents that report they always wear masks?

The table ID is mask_use_by_county and the columns are: county_fips_code, always

- Show a screenshot of the plot and the code used to generate it for your lab notebook



- From within your Jupyter notebook, run the query and write code that shows the first 10 states that reached 1000 deaths from COVID-19. Take a screenshot for your lab notebook.

```
[15]: query_string = """SELECT state_name, MIN(date) as date_of_1000
FROM `bigquery-public-data.covid19_nyt.us_states`
WHERE deaths > 1000
GROUP BY state_name
ORDER BY date_of_1000 ASC"""

df = bigquery.Client().query(query_string).to_dataframe()
df.head(10)
```

[15]:

	state_name	date_of_1000
0	New York	2020-03-29
1	New Jersey	2020-04-06
2	Michigan	2020-04-09
3	Louisiana	2020-04-14
4	Massachusetts	2020-04-15
5	Illinois	2020-04-16
6	California	2020-04-17
7	Connecticut	2020-04-17
8	Pennsylvania	2020-04-17
9	Florida	2020-04-24

Odin ID: emmanart

- Take a screenshot for your lab notebook of the Top 5 counties and the states they are located in.

```
[16]: query_string = """SELECT DISTINCT mu.county_fips_code, mu.always, ct.county
FROM `bigquery-public-data.covid19_nyt.mask_use_by_county` as mu
LEFT JOIN `bigquery-public-data.covid19_nyt.us_counties` as ct
ON mu.county_fips_code = ct.county_fips_code
ORDER BY mu.always DESC"""

df = bigquery.Client().query(query_string).to_dataframe()
df.head(5)
```

[16]:

	county_fips_code	always	county
0	06027	0.889	Inyo
1	36123	0.884	Yates
2	06051	0.880	Mono
3	48229	0.880	Hudspeth
4	48141	0.877	El Paso

Odin ID: emmanart

- Plot the results and take a screenshot for your lab notebook.



- Plot the results and take a screenshot for your lab notebook.

