

Lab Notebook – Week 8

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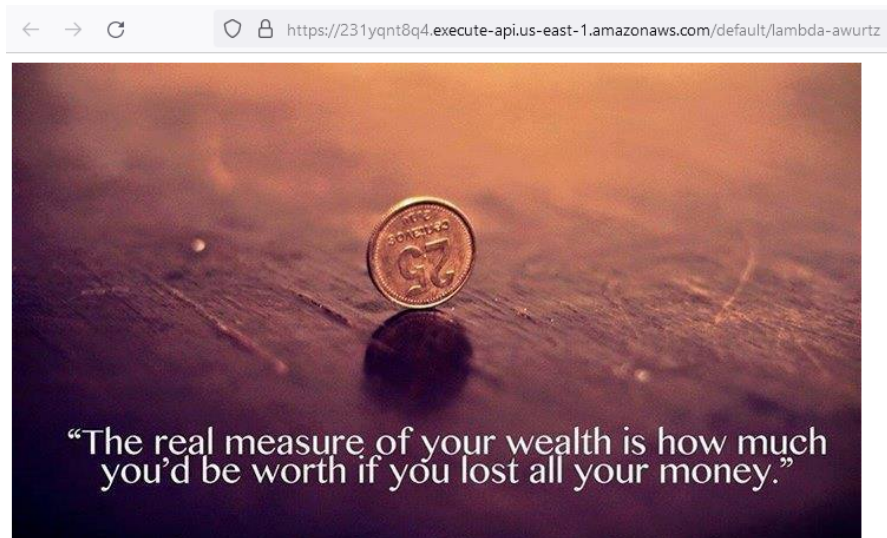
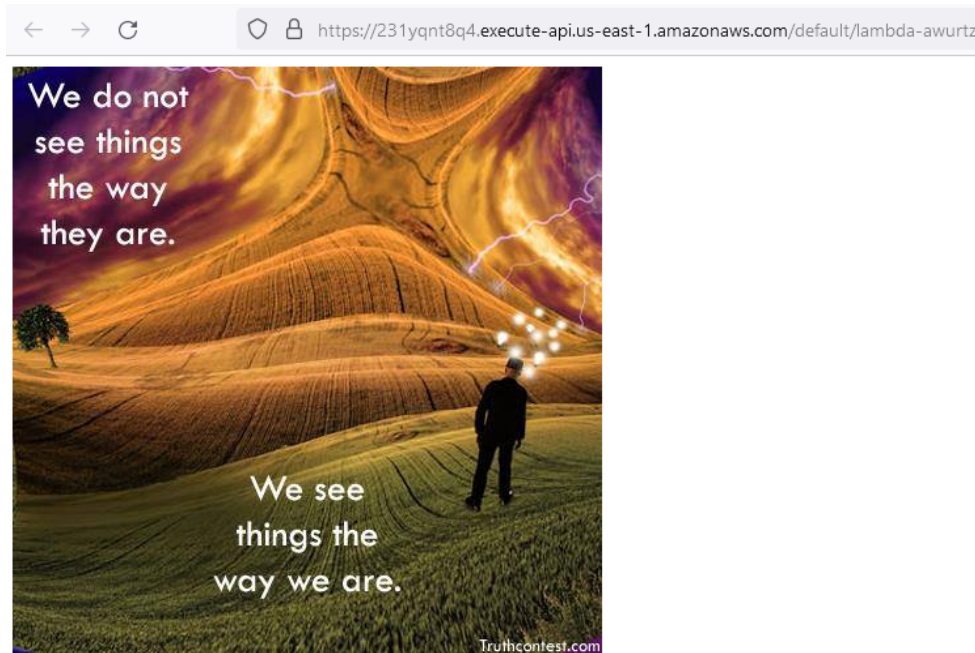
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08.1a: API Gateway

Test Code



```
Last login: Tue Oct 10 01:57:34 2023 from 35.235.240.144
awurtz@course-vm:~$ curl https://612bcbncpd.execute-api.us-east-1.amazonaws.com/default/gett
ime-awurtz
{"currentTime": "2023-11-14 21:10:27.056368"}awurtz@course-vm:~$
```

08.2a: Lambda, API Gateway Guestbook

Deploy API to production and view entries

file:///C:/Users/addis/cs430-src/06_aws_restapi_lambda/frontend/src/index.html ☆

Guestbook

Name:

Email:

Message:

Sign

Entries

Addison <awurtz@pdx.edu>
signed on 2023-11-05 23:12:13.281133
Hello ECS!

API endpoint for signing

← Method Execution /entry - POST - Method Test



Make a test call to your method. When you make a test call, API Gateway skips authorization and directly invokes your method

Path

No path parameters exist for this resource. You can define path parameters by using the syntax {myPathParam} in a resource path.

Query Strings

{entry}

Request: /entry

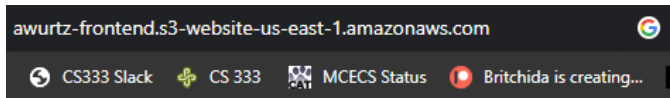
Status: 200

Latency: 421 ms

Response Body

```
[{"message": "Hello ECS!", "date": "2023-11-05 23:12:13.281133", "email": "awurtz@pdx.edu", "name": "Addison"}, {"message": "Hello API Gateway", "date": "2023-11-15 01:22:10.888522", "email": "awurtz@pdx.edu", "name": "Addison"}]
```

Configure and Deploy the Frontend



Entries

Addison <awurtz@pdx.edu>
signed on 2023-11-05 23:12:13.281133
Hello ECS!

Addison <awurtz@pdx.edu>
signed on 2023-11-15 01:22:10.888522
Hello API Gateway

Addison <awurtz@pdx.edu>
signed on 2023-11-15 01:38:09.790700
Hello API Gateway from local HTML

Addison <awurtz@pdx.edu>
signed on 2023-11-15 01:46:08.043458
Hello S3, API Gateway, Lambda!

08.2g: Cloud Functions API Gateway Guestbook

<https://us-central1-cloud-wurtz-awurtz.cloudfunctions.net/entries>

<https://us-central1-cloud-wurtz-awurtz.cloudfunctions.net/entry>

Create the API Gateway

```
awurtz@cloudshell:~/cs430-src/06_gcp_restapi_cloudfunctions (cloud-wurtz-awurtz)$ gcloud api-gateway gateways describe gbapigw --location=us-central1
apiConfig: projects/254826337631/locations/global/apis/gbapi/configs/gbapiconfig
createTime: '2023-11-16T19:42:39.755613364Z'
defaultHostname: gbapigw-392d0sin.uc.gateway.dev
displayName: gbapigw
name: projects/cloud-wurtz-awurtz/locations/us-central1/gateways/gbapigw
state: ACTIVE
updateTime: '2023-11-16T19:46:18.387112512Z'
awurtz@cloudshell:~/cs430-src/06_gcp_restapi_cloudfunctions (cloud-wurtz-awurtz)$
```

Hostname: gbapigw-392d0sin.uc.gateway.dev

Test the API via Python Requests (GET)

```
>>> for each in resp_json: print(each['name'] + '\n' + each['email'] + '\n' + each['date'] + '\n' + each['message'] + '\n')
...
Addison
awurtz@pdx.edu
2023-11-05 23:51:36.734893+00:00
Hello Cloud Run!

Addison
awurtz@pdx.edu
2023-11-03 22:25:33.192990+00:00
Hello App Engine!

Addison
awurtz@pdx.edu
2023-11-13 03:25:00.004375+00:00
Hello Cloud Build!







Addison
awurtz@pdx.edu
2023-11-13 02:49:00.581541+00:00
Hello Kubernetes!
```


Test the API via Python Requests (POST)

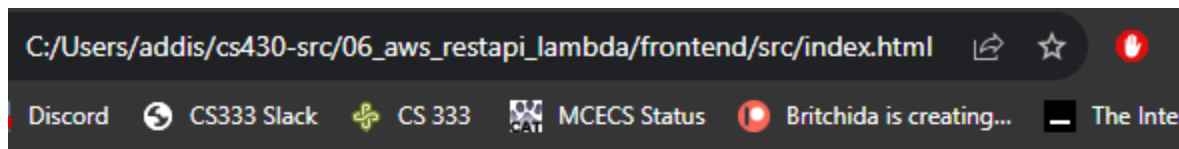
```
(cloud-wurtz-awurtz) x + v
Open Editor
>>> print(str(resp.status_code) + '\n' + str(resp.headers) + '\n' + str(resp.text))

200
{'content-type': 'application/json', 'access-control-allow-origin': '*', 'function-execution-id': '2gu21vnf5g81', 'x-cloud-trace-context': 'daad0cf8354f7ff35f1c2e9984749860;o=1', 'alt-svc': 'h3=":443"; ma=2592000,h3-29=":443"; ma=2592000', 'Date': 'Thu, 16 Nov 2023 20:20:08 GMT', 'Server': 'Google Frontend', 'Content-Length': '646'}
[{"name": "Addison", "email": "awurtz@pdx.edu", "date": "2023-11-05 23:51:36.734893+00:00", "message": "Hello Cloud Run!"}, {"name": "Addison", "email": "awurtz@pdx.edu", "date": "2023-11-03 22:25:33.192990+00:00", "message": "Hello App Engine!"}, {"name": "Addison", "email": "awurtz@pdx.edu", "date": "2023-11-16 20:20:07.617940+00:00", "message": "Hello Cloud Functions from Python Requests!"}, {"name": "Addison", "email": "awurtz@pdx.edu", "date": "2023-11-13 03:25:00.004375+00:00", "message": "Hello Cloud Build!"}, {"name": "Addison", "email": "awurtz@pdx.edu", "date": "2023-11-13 02:49:00.581541+00:00", "message": "Hello Kubernetes!"}]
>>>
```

Version #1: Local File System

Name	Status	Type	Initiator	Size	T...	W
 index.html	200	document	Other	876 B	3...	I
 style.css	200	stylesheet	index.html:5	574 B	6...	■
 guestbook.js	200	script	index.html:6	2.4 kB	6...	■
 entries	200	fetch	guestbook.js:68	305 B	1...	I
 entries	200	preflight	Preflight 	0 B	1...	I

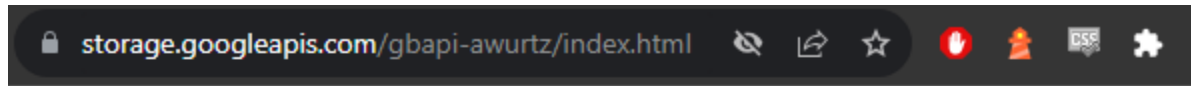
 ODIN ID awurtz • + — □ ×



Entries

Addison <awurtz@pdx.edu>
signed on 2023-11-16 20:47:28.928198+00:00
Hello API Gateway from local SPA!

Version #2: Google Cloud Storage bucket



Addison <awurtz@pdx.edu>
signed on 2023-11-16 20:53:23.021165+00:00
Hello API Gateway from SPA in GCS!

08.3g: OAuth2 Guestbook

<https://gcp-oauth-gb-jpg37fqnga-uw.a.run.app>


Client id:
254826337631-1t9dotc4jsrtu5seef624vvcgq7tsas0.apps.googleusercontent.com

Client secret:
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

Visit the application

► GET <https://gcp-oauth-gb-jpg37fqnga-uw.a.run.app/sign>

Status	302
Version	HTTP/2
Transferred	109.54 kB (633.97 kB size)
Referrer Policy	strict-origin-when-cross-origin
Request Priority	Highest
DNS Resolution	DNS over HTTPS

 ODIN ID awurtz

▶ GET https://accounts.google.com/o/oauth2/auth?response_type=code&client_id=254826337631-1t9dotc4jsrtu5seef624wvcqg7tsas0.apps.googleusercontent.com&redirect_uri=https://gcp-oauth-gb-jpg37fqnga-uw.a.run.app/callback&scope=https://www.googleapis.com/auth/userinfo.email https://www.googleapis.com/auth/userinfo.profile&state=8uKjhbmPNFKGCPPgNsKjBlBeaoDqwM&prompt=login

Status	302 ?
Version	HTTP/2
Transferred	111.51 kB (633.97 kB size)
Referrer Policy	strict-origin-when-cross-origin
Request Priority	Highest
DNS Resolution	DNS over HTTPS

ODIN ID awurtz

File Edit View

ODIN ID: awurtz

Based on the description of the source code, what lines of code in our application are responsible for the second request shown?

In sign.py, lines 15-28 redirects the user to sign in with the identity provider.

Sign in

to continue to **Guestbook**

Email or phone

awurtz@pdx.edu

[Forgot email?](#)

To continue, Google will share your name, email address, language preference, and profile picture with Guestbook.

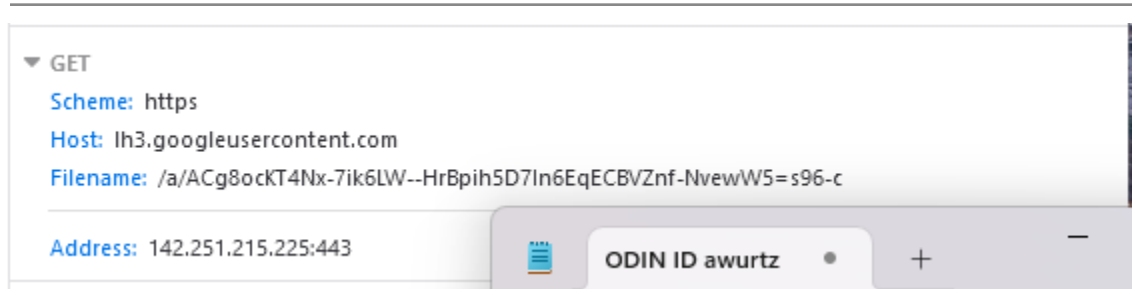
▶ GET https://gcp-oauth-gb-jpg37fqnga-uw.a.run.app/callback?state=aGDfI3JnIB2s0xbuRCvkrovmvPcdZ&code=4/0AfJohXmbfK0yQL1jkpg-nasE4pCBijN9EBpGzTPQIUjATjNL3mmizd6clJ6FMf6UgUc1Eg&scope=email profile https://www.googleapis.com/auth/userinfo.email https://www.googleapis.com/auth/userinfo.profile openid&authuser=0&hd=pdx.edu&prompt=none

Status	302 ?
Version	HTTP/2

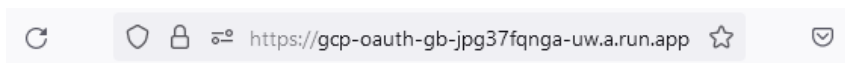
ODIN ID awurtz

+

https://gcp-oauth-gb-jpg37fqnga-uw.a.run.app/callback?state=ILWC8ZuYdIdJlziXlrc8NGg149WX8i&code=4/0AfJohXmn5GTdqN9RkJSGWhWI9Rgf4yEnQ5NIRjp_PGaOGMAvDB9oHhD3brL_udGyW0ahw&scope=email profile https://www.googleapis.com/auth/userinfo.email https://www.googleapis.com/auth/userinfo.profile openid&authuser=0&hd=pdx.edu&prompt=consent



Secrets manager deployment



Guestbook

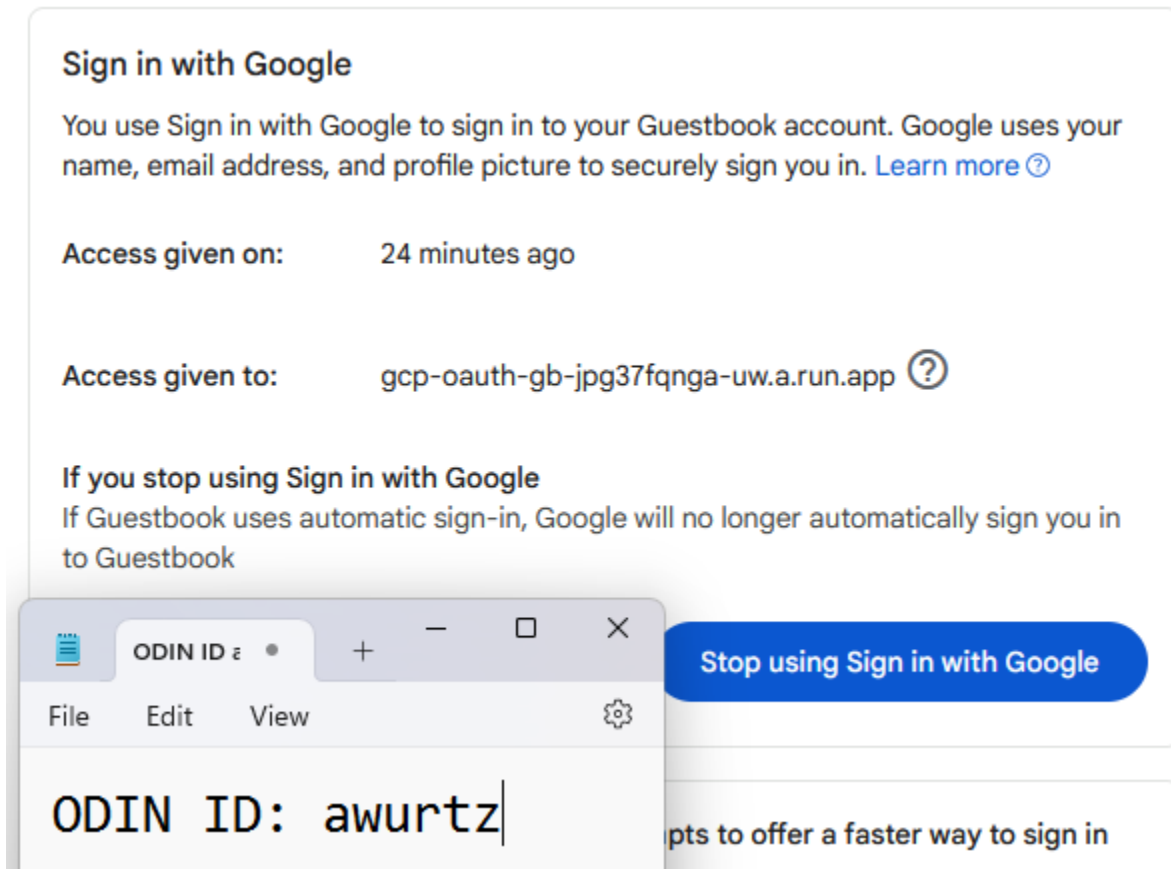
[Sign here](#) | [Logout](#)

Entries

A Addison Wurtz <addisonwurtz@gmail.com>
on 2023-11-17 01:28:10.499199+00:00
Hello OAuth from my gmail account!

A Addison Wurtz <awurtz@pdx.edu>
on 2023-11-17 01:22:29.663523+00:00
Hello from Google OAuth!

Removing Access



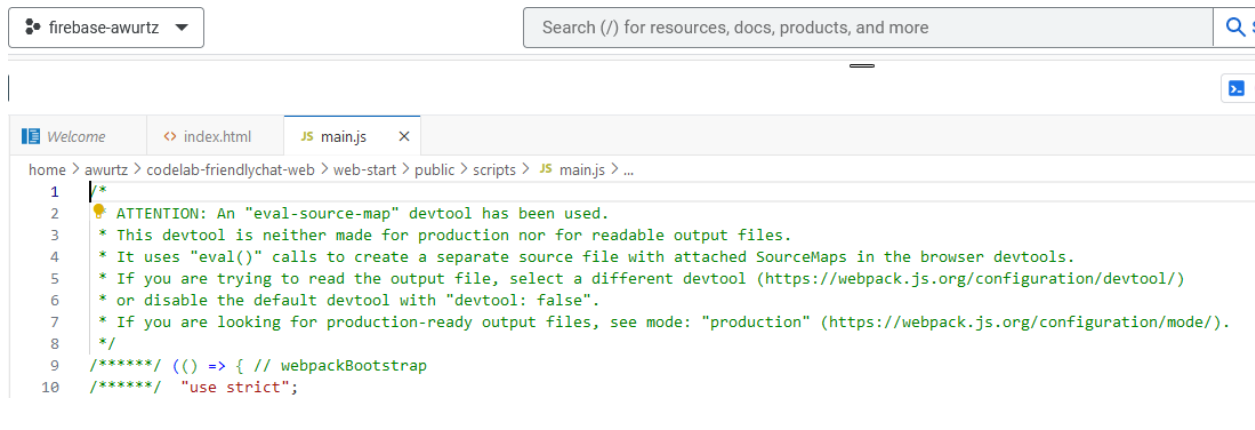
08.4g: Firebase

Authentication setup

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

Localhost, fir-awurtz.firebaseio.com, and fir-awurtz.web.app

Building with Webpack



The screenshot shows a web browser with a search bar at the top containing 'firebase-awurtz'. Below the search bar is a code editor with three tabs: 'Welcome', 'index.html', and 'JS main.js'. The 'JS main.js' tab is active, displaying the following code:

```
1  /*
2  * ATTENTION: An "eval-source-map" devtool has been used.
3  * This devtool is neither made for production nor for readable output files.
4  * It uses "eval()" calls to create a separate source file with attached SourceMaps in the browser devtools.
5  * If you are trying to read the output file, select a different devtool (https://webpack.js.org/configuration/devtool/)
6  * or disable the default devtool with "devtool: false".
7  * If you are looking for production-ready output files, see mode: "production" (https://webpack.js.org/configuration/mode/).
8  */
9  /******/ (() => { // webpackBootstrap
10 /******/  "use strict";
```

Add authentication

What missing functions deal with user authentication?

signIn(), signOutUser(), initFirebaseAuth(), and isUserSignedIn()

What missing functions deal with sending and receiving messages?

saveMessage(), loadMessages(), and saveImageMessage()

Update UI

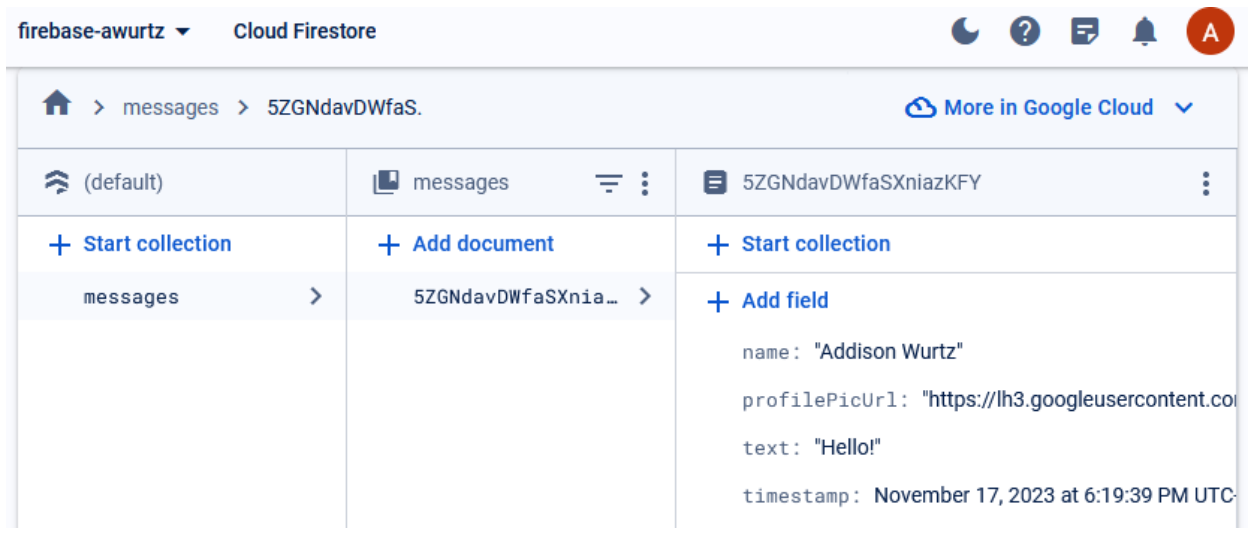
What are the names of the elements that are hidden when the user is signed out?

userNameElement, userPicElement, signOutButtonElement

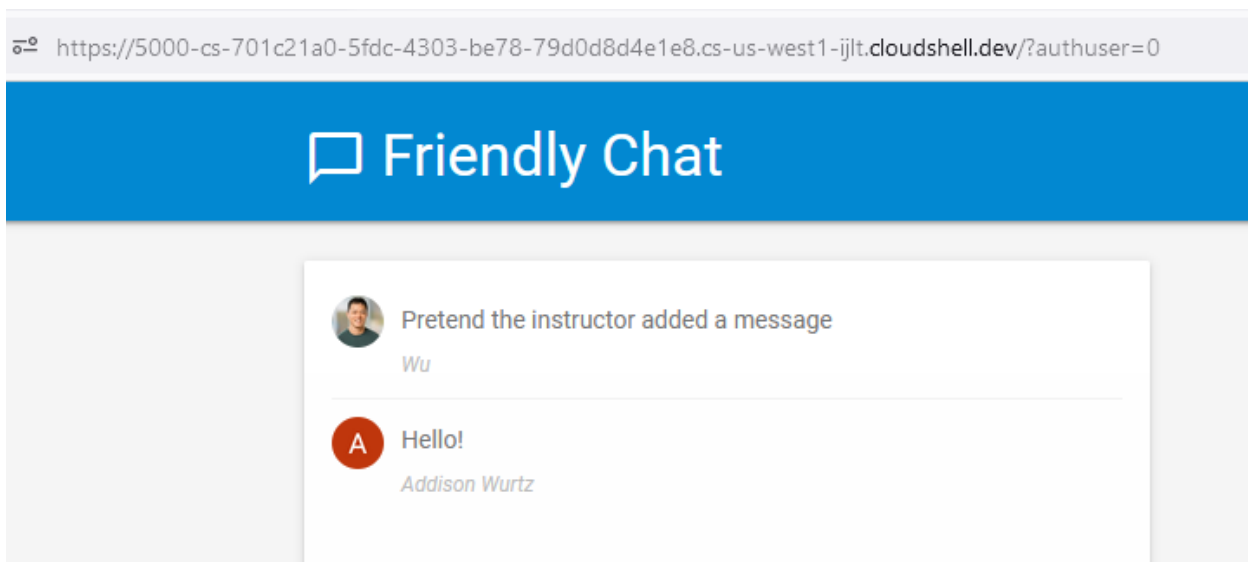
What is the name of the element that is not hidden when the user is signed out?

signInButtonElement

Test application with text messaging



Manual message insertion



Add image message

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>

Test application with image messaging

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

There is an imageUrl and storage Uri field, and there is no text field.

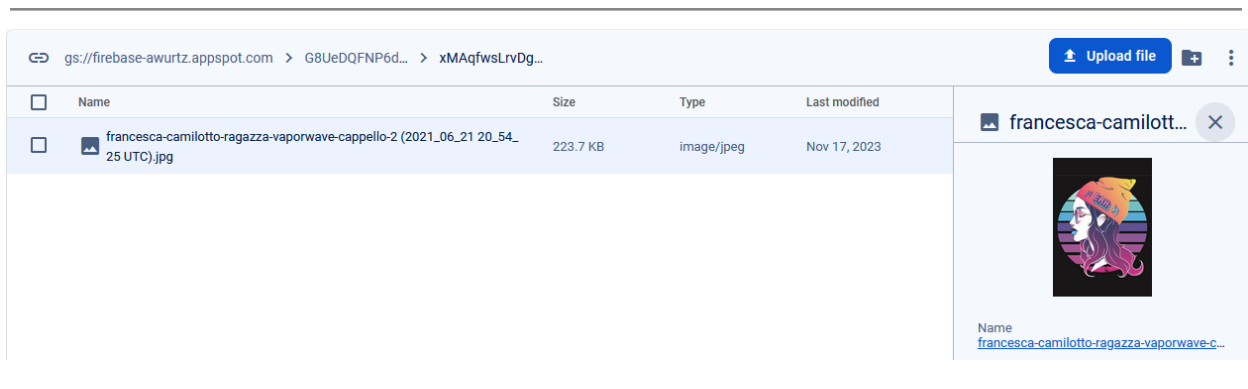
What URL and storage location can the image be found at?

ImageUrl:

[https://firebasestorage.googleapis.com/v0/b/firebase-awurtz.appspot.com/o/G8UeDQFNP6dTA8S8Ab59LPjqlkK2%2F%2F%2Ffrancesca-camilotto-ragazza-vaporwave-cappello-2%20\(2021_06_21%2020_54_25%20UTC\).jpg?alt=media&token=4c05f5e7-3ae7-4f52-a8bd-4f3389671710](https://firebasestorage.googleapis.com/v0/b/firebase-awurtz.appspot.com/o/G8UeDQFNP6dTA8S8Ab59LPjqlkK2%2F%2F%2Ffrancesca-camilotto-ragazza-vaporwave-cappello-2%20(2021_06_21%2020_54_25%20UTC).jpg?alt=media&token=4c05f5e7-3ae7-4f52-a8bd-4f3389671710)

storageUri:

G8UeDQFNP6dTA8S8Ab59LPjqlkK2/xMAqfwsLrvDgLMv83o58/francesca-camilotto-ragazza-vaporwave-cappello-2 (2021_06_21 20_54_25 UTC).jpg



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notebooks/Week8

Deploy application

What directory is the application going to be served from?

./public

