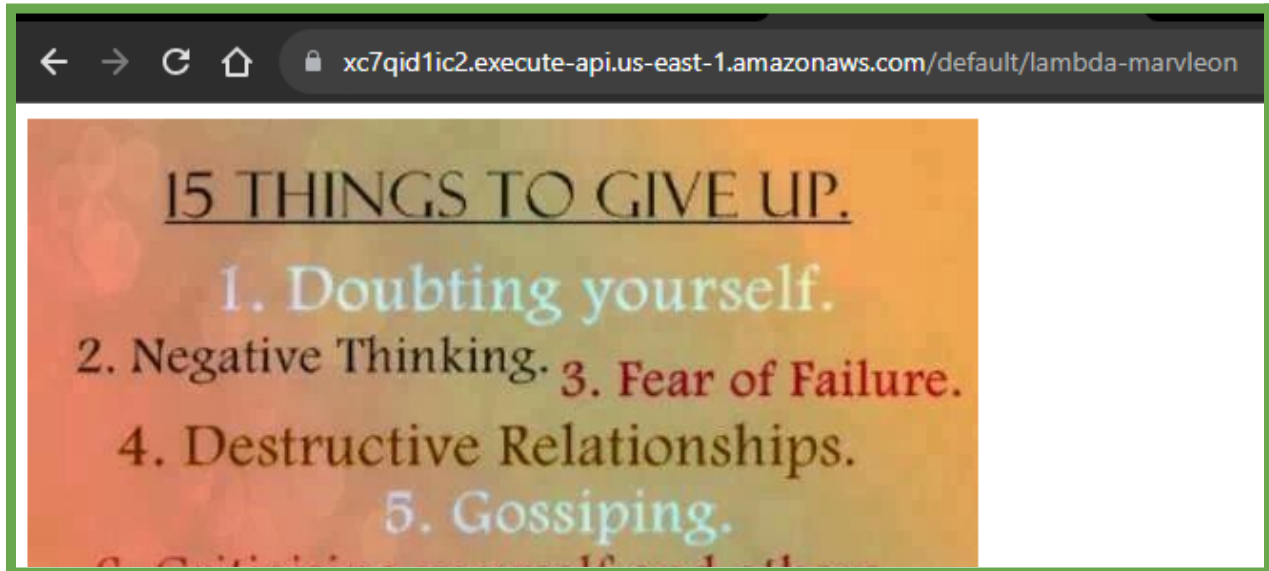# Lab Week 8 — marvleon

8.1a API Gateway

8.1.4 Test code

8.1.8 Test code

8.2a Lambda, API Gateway Guestbook

8.2.10 Deploy API to production and view entries

8.2.12 API endpoint for signing

8.2.16 Configure and Deploy the Frontend

8.2g Cloud Functions API Gateway Guestbook

8.2.10 Create the API Gateway

```
marvleon@cloudshell:~/code/cs430-src/06_gcp_restapi_cloudfunctions (cloud-leon-marvleon)$
ll
apiConfig: projects/156874191619/locations/global/apis/gbapi/configs/gbapiconfig
createTime: '2023-11-20T06:16:07.834467217Z'
defaultHostname: gbapigw-202eucxv.uc.gateway.dev
displayName: gbapigw
name: projects/cloud-leon-marvleon/locations/us-central1/gateways/gbapigw
state: ACTIVE
updateTime: '2023-11-20T06:20:06.886944981Z'
marvleon@cloudshell:~/code/cs430-src/06_gcp_restapi_cloudfunctions (cloud-leon-marvleon)$
```
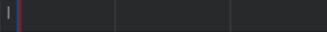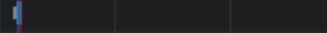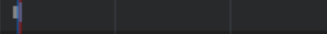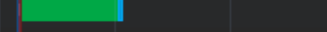
8.2.11 Test the API via Python Requests (GET)

```
>>> resp = requests.get('https://gbapigw-202eucxv.uc.gateway.dev/entries')
>>> data = resp.json()
>>> for entry in data:
...     print("Name:", entry["name"])
...     print("Email:", entry["email"])
...     print("Date:", entry["date"])
...     print("Message:", entry["message"])
...     print("---")
...
Name: marvin leon
Email: marvleon@pdx.edu
Date: 2023-10-31 06:46:42.377145+00:00
Message: Hello Compute Engine!
---
Name: marvin leon
Email: marvleon@pdx.edu
Date: 2023-10-31 05:55:05.720587+00:00
Message: Hello Datastore!
---
Name: marvin leon
Email: marvleon@pdx.edu
Date: 2023-11-05 21:06:01.565336+00:00
Message: Hello App Engine!!
---
Name: marvin leon
Email: marvleon@pdx.edu
Date: 2023-10-31 06:39:15.348048+00:00
Message: Hello Cloud Shell!
---
Name: marvin leon
Email: marvleon@pdx.edu
Date: 2023-11-14 05:08:16.292588+00:00
Message: hello Kubernetes!
---
Name: Marvin Leon
Email: marvleon@pdx.edu
Date: 2023-10-31 06:29:57.905500+00:00
Message: Hello Docker Datastore!!
---
Name: marvin leon
Email: marvleon@pdx.edu
Date: 2023-11-07 04:57:35.133824+00:00
Message: Hello Cloud Run!!
---
Name: marvin leon
Email: marvleon@pdx.edu
Date: 2023-11-14 06:00:34.891464+00:00
Message: Hello Cloud Build!!!!!!!
---
>>>
```

8.2.12 Test the API via Python Requests (POST)

```
>>> import requests
>>> resp = requests.get('https://gbapigw-202eucxv.uc.gateway.dev/entries')
>>> data = resp.json()
>>> import json
>>> mydict = {
...     'name' : 'Marvin Leon',
...     'email' : 'marvleon@pdx.edu',
...     'message' : 'Hello Cloud Function from Python Requests!'
...
... }
... >>> resp = requests.post('https://gbapigw-202eucxv.uc.gateway.dev/entry', json=mydict)
>>> resp.status_code
200
>>> resp.headers
{'content-type': 'application/json', 'access-control-allow-origin': '*', 'function-execution-id': 'aes66c
i4xq8o', 'x-cloud-trace-context': 'e6f1d5f644069e253e602301134d3c49;o=1', 'alt-svc': 'h3=":443"; ma=25920
00,h3-29=":443"; ma=2592000, h3=":443"; ma=2592000,h3-29=":443"; ma=2592000', 'Date': 'Tue, 21 Nov 2023 0
0:00:48 GMT', 'Server': 'Google Frontend', 'Content-Length': '1214'}
>>> resp.text
'[{"name": "marvin leon", "email": "marvleon@pdx.edu", "date": "2023-10-31 06:46:42.377145+00:00", "messa
ge": "Hello Compute Engine!"}, {"name": "marvin leon", "email": "marvleon@pdx.edu", "date": "2023-10-31 0
5:55:05.720587+00:00", "message": "Hello Datastore!"}, {"name": "marvin leon", "email": "marvleon@pdx.edu
", "date": "2023-11-05 21:06:01.565336+00:00", "message": "Hello App Engine!!"}, {"name": "marvin leon",
"email": "marvleon@pdx.edu", "date": "2023-10-31 06:39:15.348048+00:00", "message": "Hello Cloud Shell!"}
, {"name": "marvin leon", "email": "marvleon@pdx.edu", "date": "2023-11-14 05:08:16.292588+00:00", "messa
ge": "hello Kubernetes!"}, {"name": "Marvin Leon", "email": "marvleon@pdx.edu", "date": "2023-11-21 00:00
:47.773778+00:00", "message": "Hello Cloud Function from Python Requests!"} {"name": "Marvin Leon", "ema
il": "marvleon@pdx.edu", "date": "2023-10-31 06:29:57.905500+00:00", "message": "Hello Docker Datastore!!
"}, {"name": "marvin leon", "email": "marvleon@pdx.edu", "date": "2023-11-07 04:57:35.133824+00:00", "mes
sage": "Hello Cloud Run!!"}, {"name": "marvin leon", "email": "marvleon@pdx.edu", "date": "2023-11-14 06:
00:34.891464+00:00", "message": "Hello Cloud Build!!!!!!!"}]'
!!"}]'
>>>
```
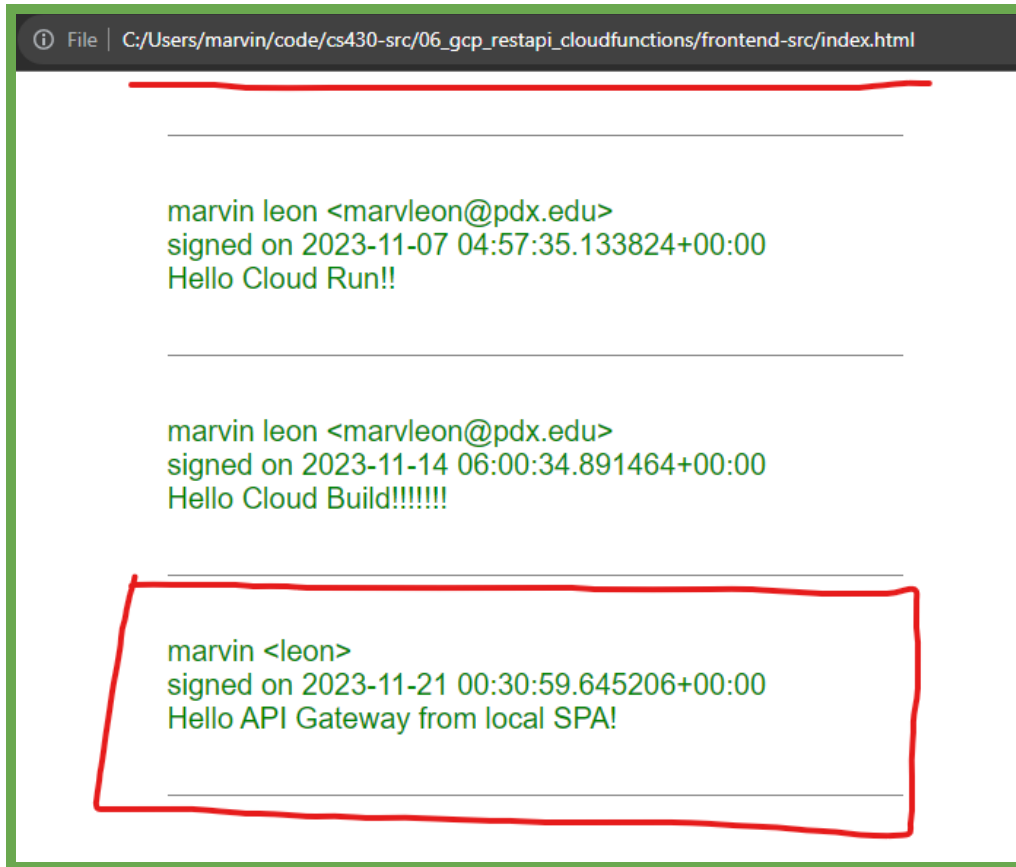
8.2.15 Version #1: Local file system

Name	Status	Type	Initiator	Size	Time	Waterfall
index.html	200	docum...	Other	876 B	2 ms	
style.css	200	stylesh...	index.html:5	574 B	5 ms	
guestbook.js	200	script	index.html:6	2.4 kB	5 ms	
entries	200	fetch	guestbook.js:68	383 B	207 ms	
entries	200	preflight	Preflight	0 B	87 ms	

marvin leon <marvleon@pdx.edu>
signed on 2023-11-07 04:57:35.133824+00:00
Hello Cloud Run!!

marvin leon <marvleon@pdx.edu>
signed on 2023-11-14 06:00:34.891464+00:00
Hello Cloud Build!!!!!!!

marvin <leon>
signed on 2023-11-21 00:30:59.645206+00:00
Hello API Gateway from local SPA!

8.2.16 Google Cloud Storage bucket

🔒 storage.googleapis.com/gbapi-marvleon/index.html

marvin <leon>
signed on 2023-11-21 00:30:59.645206+00:00
Hello API Gateway from local SPA!

marvin leon <marvleon@pdx.edu>
signed on 2023-11-21 00:36:29.931768+00:00
Hello API gateway from SPA in GCS!
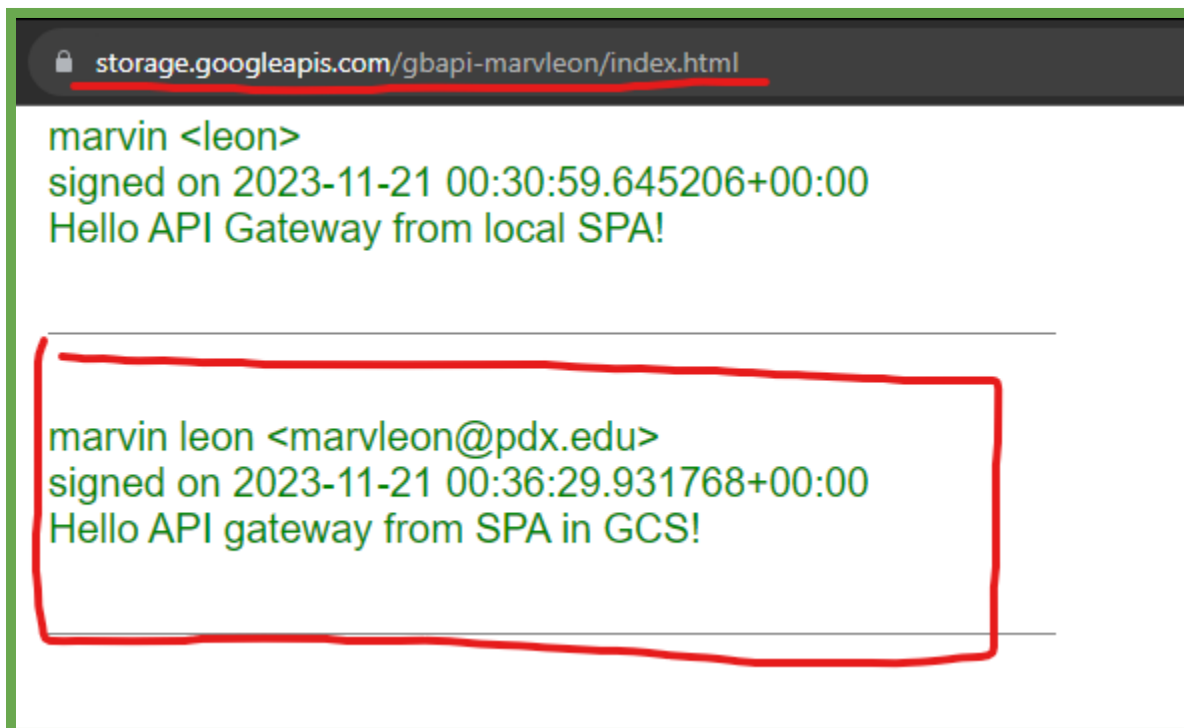
8.3g OAuth2 Guestbook

8.3.14 Visit the application


```
token = google.fetch_token(token_url,
    client_secret=client_secret,
    authorization_response=request.url)
```
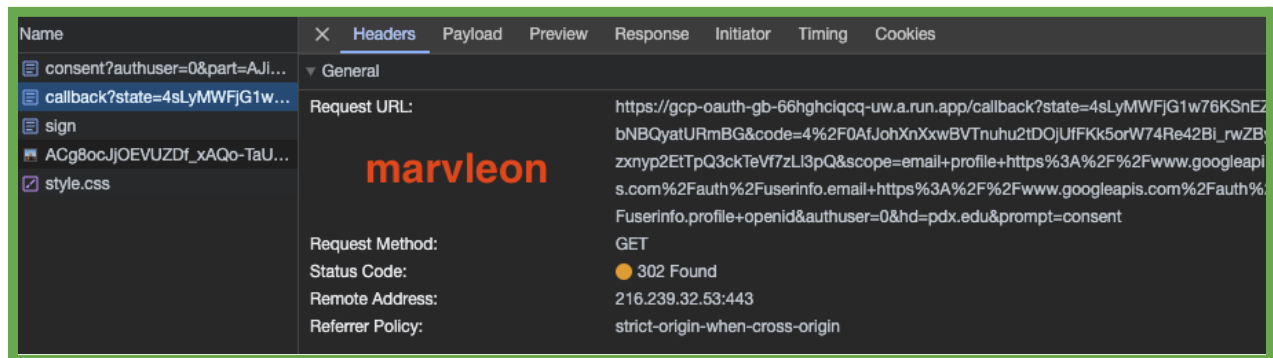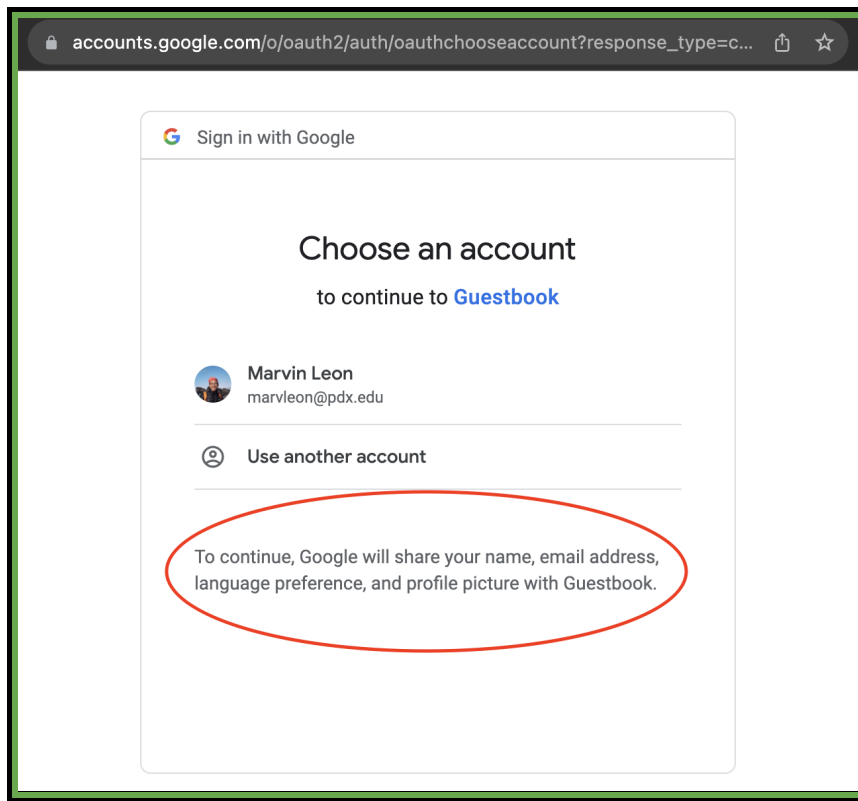
/sign
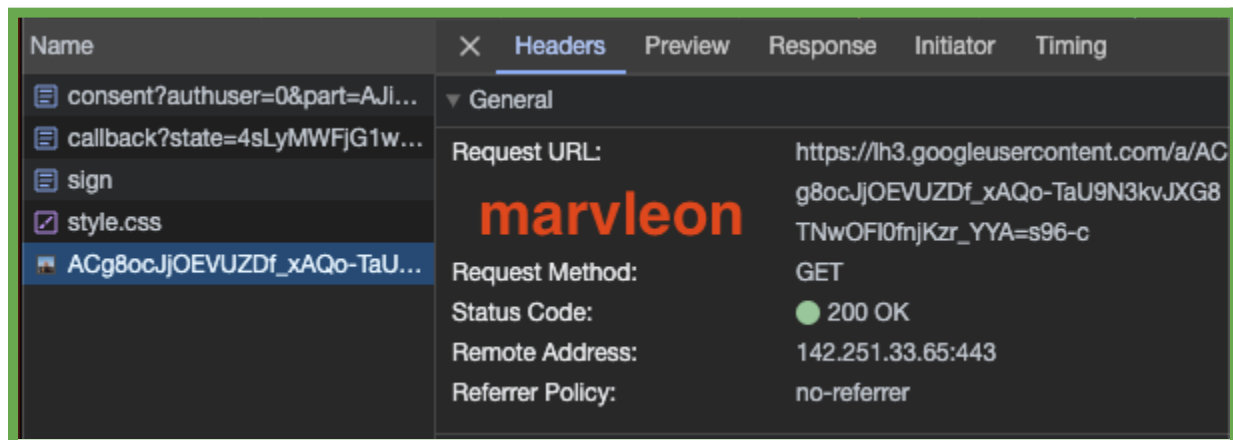
8.3.16 Removing access

Google Account

How Google helps you sign in to Guestbook

Sign in with Google

You use Sign in with Google to sign in to your Guestbook account. Google uses your name, email address, and profile picture to securely sign you in. Learn more ⑦

Access given on:
40 minutes ago

marvleon

Access given to:
gcp-oauth-gb-66hghciqcq-uw.a.run.app ⑦

If you stop using Sign in with Google
If Guestbook uses automatic sign-in, Google will no longer automatically sign you in to Guestbook

Stop using Sign in with Google

Guestbook uses Google Account sign-in prompts to offer a faster way to sign in
To make changes, go to Settings

8.4g Firebase

8.4.4 Authentication setup

What other domains are given access to this Firebase project by default?
> localhost, fir-marvleon.firebaseapp.com, fir-marvleon.web.app

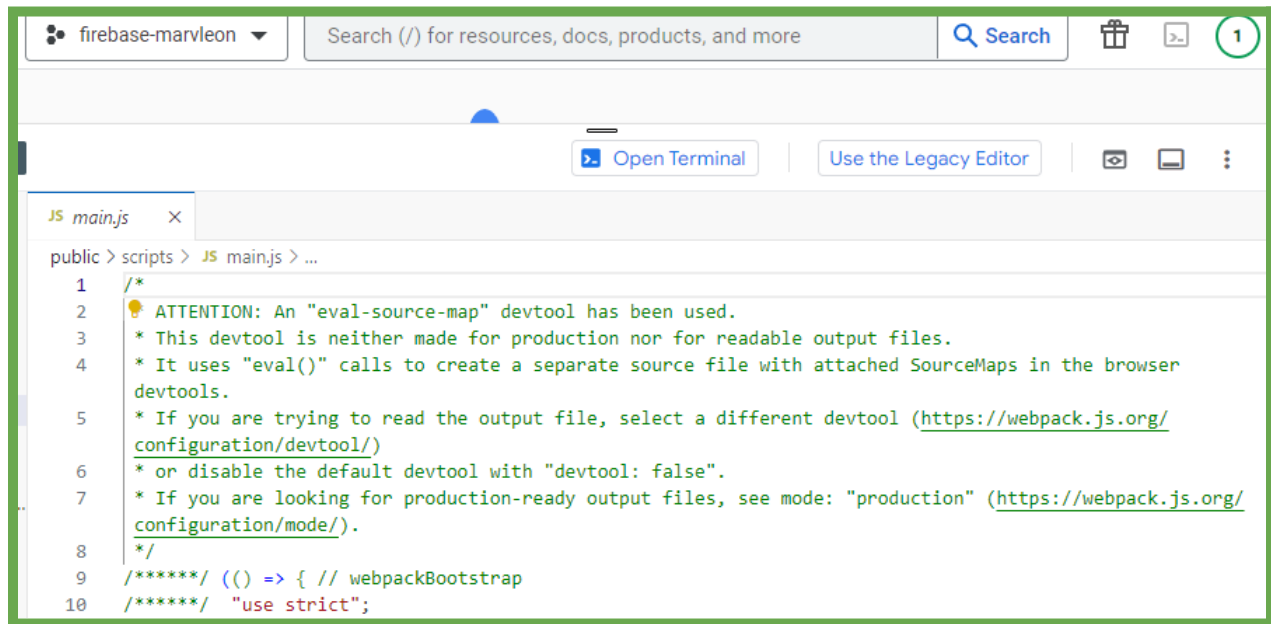## 8.4.8 Bundling with Webpack

8.4.12 Add authentication

What missing functions deal with user authentication?
signIn() signOutUser() initFirebaseAuth() getProfilePicUrl() getUserName() isUserSignedIn()

What missing functions deal with sending and receiving messages?
saveMessage(), loadMessages(), saveImageMessage(), saveMessagingDeviceToken(),
requestNotificationsPermissions()

8.4.13 Update UI

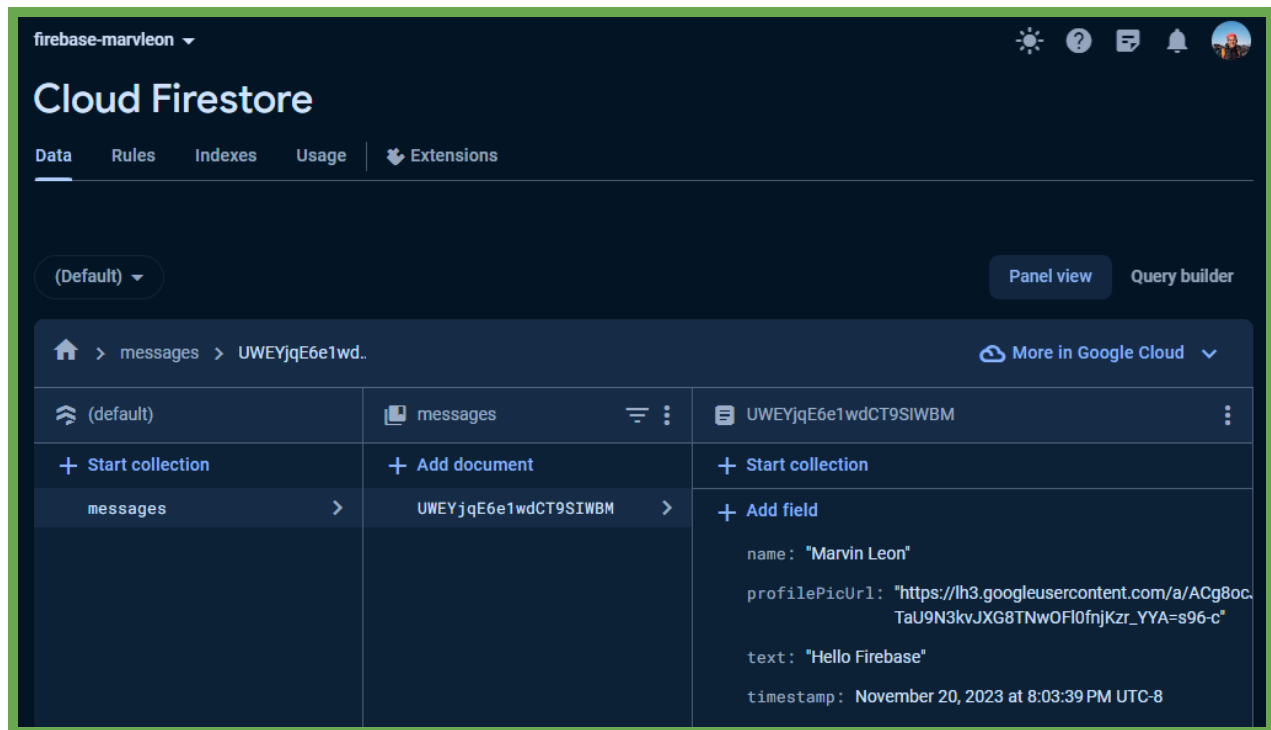***What are the names of the elements that are hidden when the user is signed out?***
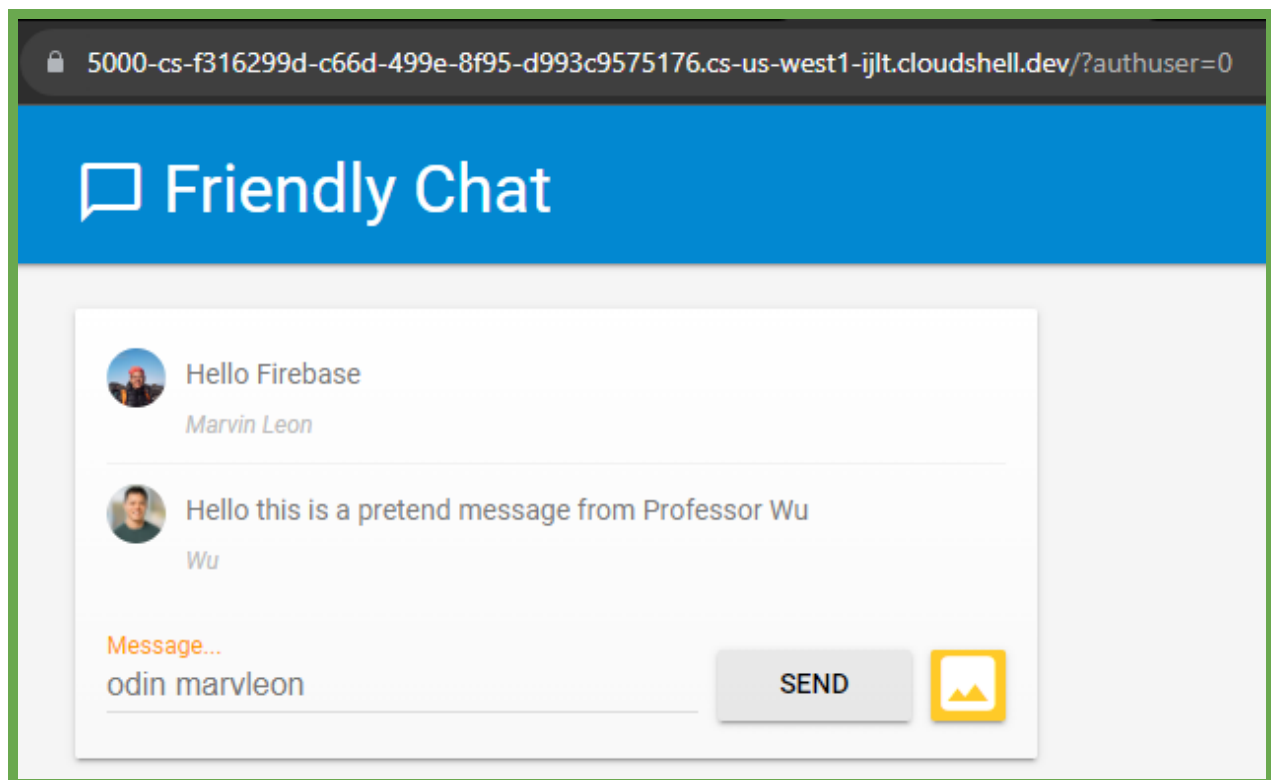> userNameElement, userPicElement,signOutButtonElement

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

8.4.16 Test application with text messaging

8.4.17 Manual message insertion

8.4.18 Add image messaging

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

8.4.19 Test application with image messaging

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

Image document includes an imageUrl and storageUri

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

imageUrl:

"https://firebasestorage.googleapis.com/v0/b/firebase-marvleon.appspot.com/o/CoxUtYYio7VXSEA9UMzzSLXkUwn2%2F8MwS2eUyfWnv2epo3ORJ%2FScreen_Shot_2022-10-24_at_4.19.01_PM-removebg-preview.png?alt=media&token=386f6480-6ecb-45e1-981f-9e3410151575"

storageUri:

"CoxUtYYio7VXSEA9UMzzSLXkUwn2/8MwS2eUyfWnv2epo3ORJ/Screen_Shot_2022-10-24_at_4.19.01_PM-removebg-preview.png"

storageUrl:

gs://firebase-marvleon.appspot.com/CoxUtYYio7VXSEA9UMzzSLXkUwn2/8MwS2eUyfWnv2epo3ORJ/Screen_Shot_2022-10-24_at_4.19.01_PM-removebg-preview.png
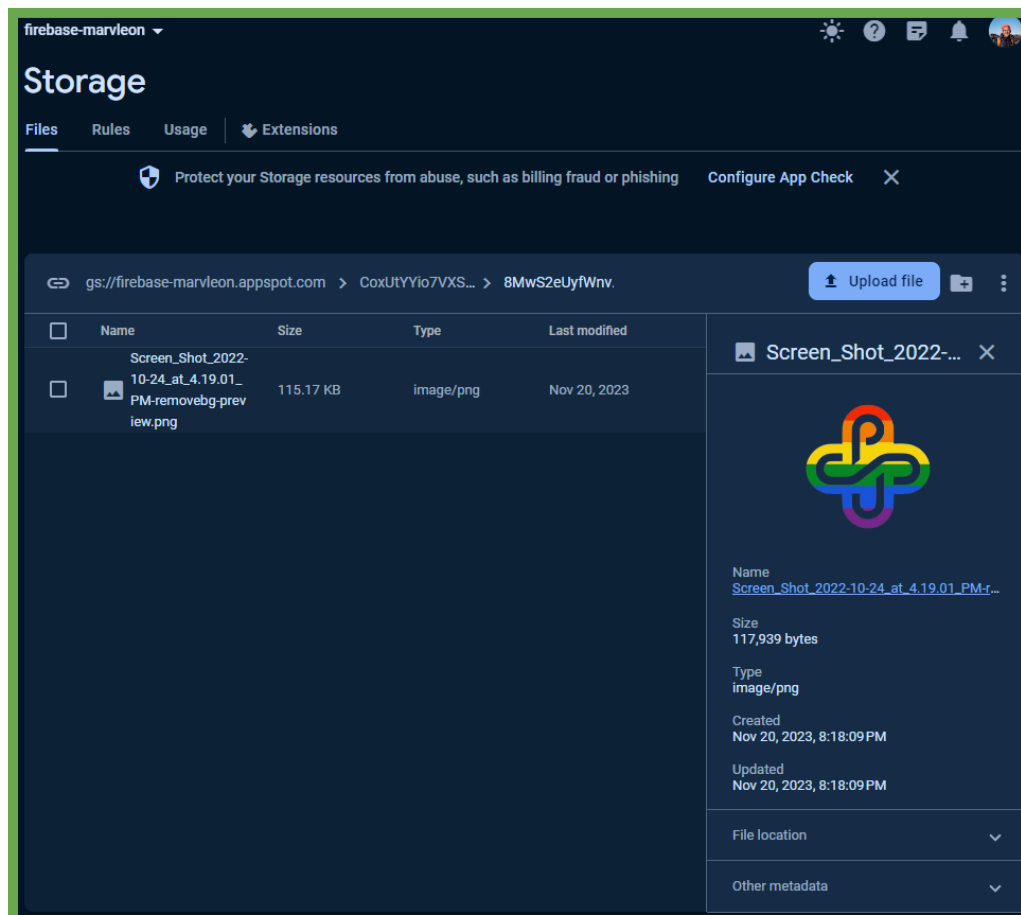
8.4.20 Deploy application

What directory is the application going to be served from?

./public