

## Lab 08

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CS530: Internet Web & Cloud, Fall 2023

Odin: srimel

\*\* In all the terminal screenshots my Odin name is in the terminal prompt \*\*

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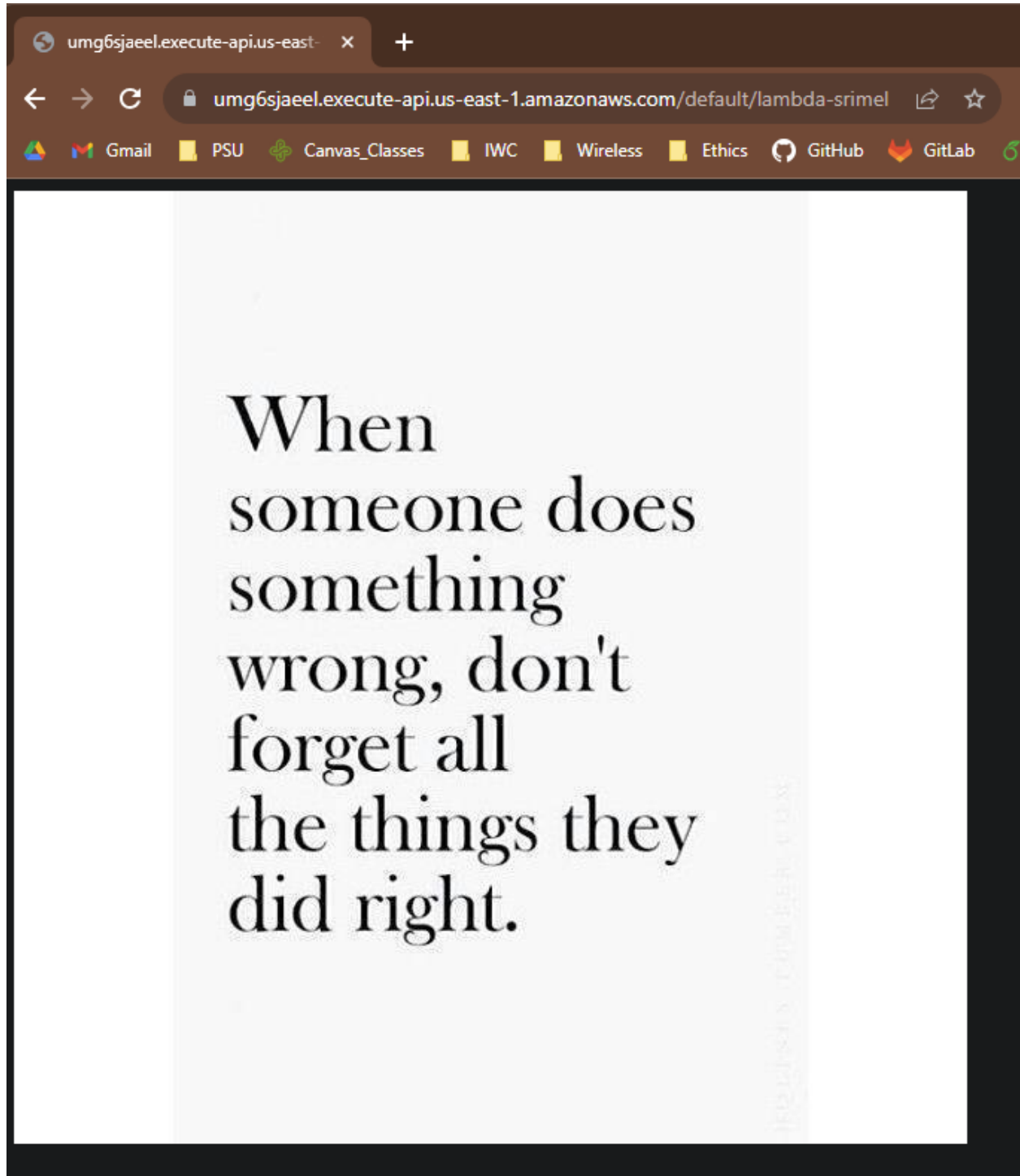
[8.4g.18: Add image messaging](#)

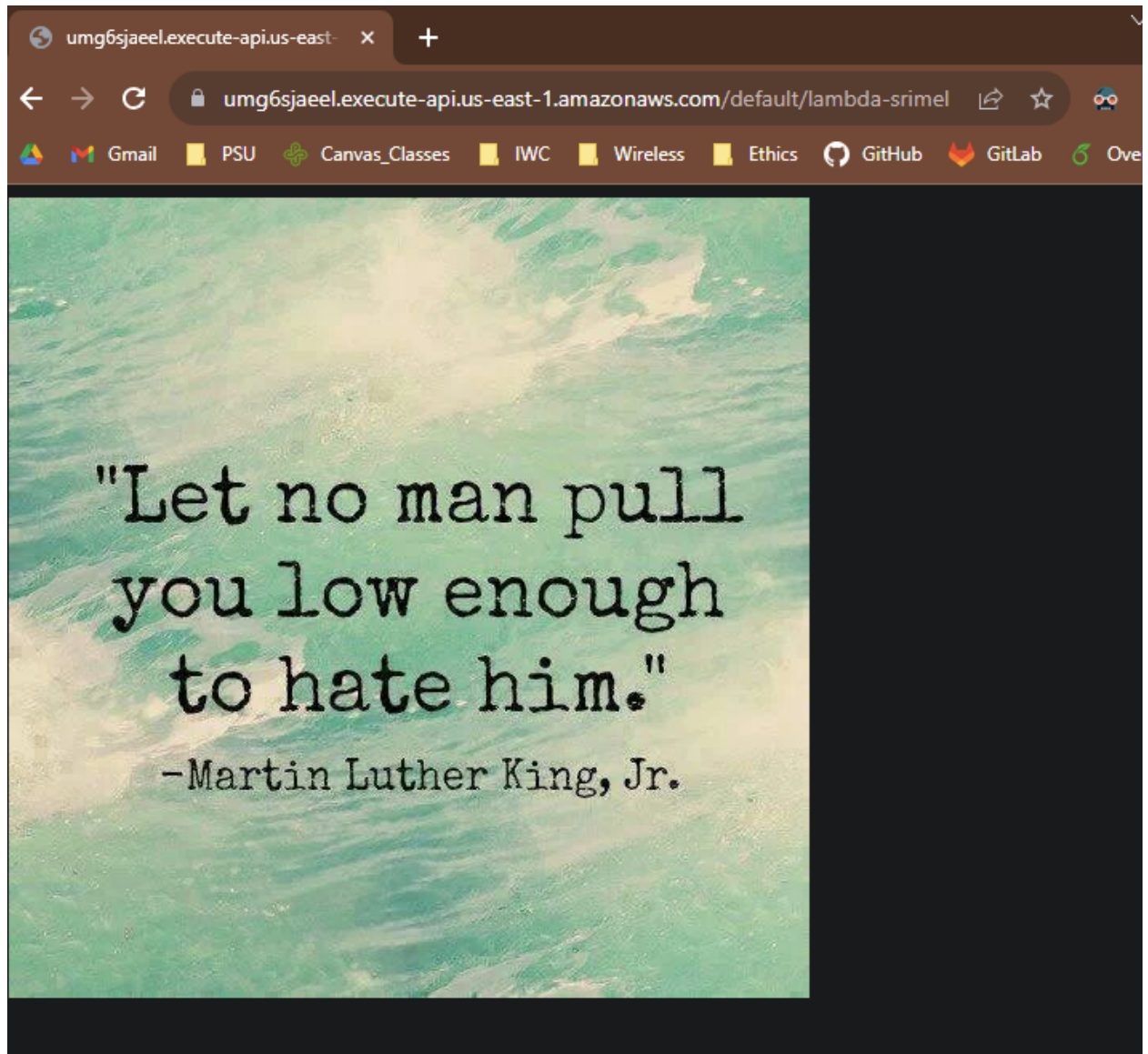
[8.4g.19: Test application with image messaging](#)

[8.4g.20: Deploy application](#)

## 8.1a: API Gateway

### 8.1a.4: Test Code



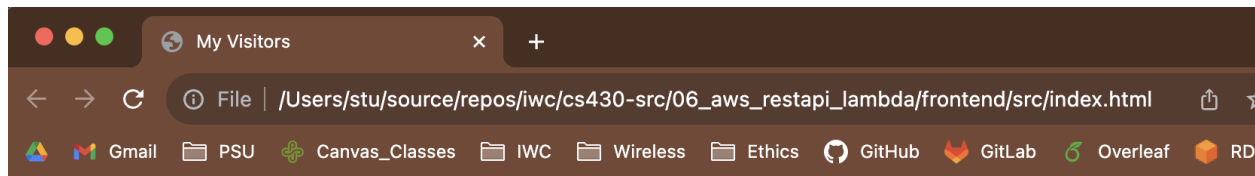


### 8.1a.8: Test code

```
srimel@course-vm-image-1:~$ curl https://3tqw963fh1.execute-api.us-east-1.amazonaws.com/default/gettime-srimel;  
echo  
{  
  "message": "Internal server error"  
}  
srimel@course-vm-image-1:~$
```

## 8.2a: Lambda, API Gateway Guestbook

### 8.2a.10: Deploy to production and view entries



### Guestbook

Name:

Email:

Message:

### Entries

Stuart Rimel <[srimel@pdx.edu](mailto:srimel@pdx.edu)>  
signed on 2023-10-27 04:12:07.268604  
Odin: srimel Hello DynamoDB!

---

Stuart Rimel <[srimel@pdx.edu](mailto:srimel@pdx.edu)>  
signed on 2023-10-27 04:24:14.842951

## 8.2a.12: API endpoint signing (2)

The screenshot shows an API testing interface. On the left, a sidebar contains a 'Create resource' button and a tree view with the following structure:

- /
- /entries
  - GET
  - OPTIONS
- /entry
  - POST (highlighted)

Below the sidebar, a text input field contains the text 'Odin: srimel'.

The main panel displays the results of a POST request to the '/entry' endpoint. It includes an information icon, the endpoint path, and the following details:

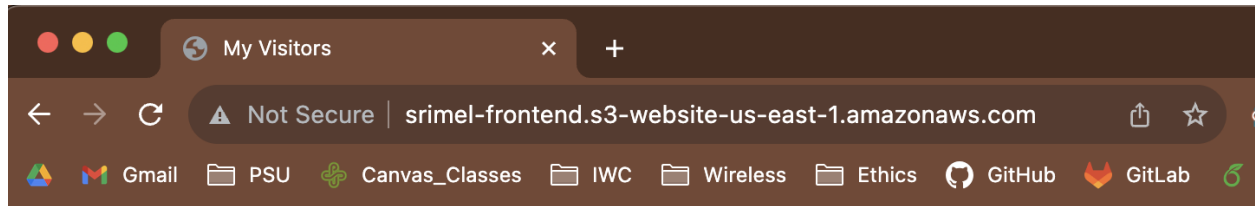
Request	Latency
/entry	434

The status of the request is 200.

The response body is a JSON array of objects, each containing 'message', 'date', 'email', and 'name' fields. The messages include 'Hello DynamoDB!', 'Hello Docker DynamoDB!', 'Hello Cloud9!', 'Hello EC2!', 'Hello Elastic Beanstalk!', and 'Hello ECS!', along with a 'test message'.

```
[{"message": "Odin: srimel\r\nHello DynamoDB!", "date": "2023-10-27 04:12:07.268604", "email": "srimel@pdx.edu", "name": "Stuart Rimel"}, {"message": "Hello Docker DynamoDB!\r\n\r\nOdin: srimel", "date": "2023-10-27 04:24:14.842951", "email": "srimel@pdx.edu", "name": "Stuart Rimel"}, {"message": "Hello Cloud9!", "date": "2023-10-30 00:30:51.786929", "email": "srimel@pdx.edu", "name": "Stuart Rimel"}, {"message": "Hello EC2!", "date": "2023-10-30 01:06:51.792502", "email": "srimel@pdx.edu", "name": "Stuart Rimel"}, {"message": "Hello Elastic Beanstalk!", "date": "2023-11-01 03:43:46.225278", "email": "srimel@pdx.edu", "name": "Stuart Rimel"}, {"message": "Hello ECS!", "date": "2023-11-03 00:31:52.480346", "email": "srimel@pdx.edu", "name": "Stuart Rimel"}, {"message": "test message", "date": "2023-11-14 21:46:41.198715", "email": "srimel@pdx.edu", "name": "Stuart"}]
```

## 8.2a.16: Configure and Deploy the Frontend



### Guestbook

Name:

Email:

Message:

### Entries

Stuart Rimel <srimel@pdx.edu>  
signed on 2023-10-27 04:12:07.268604  
Odin: srimel Hello DynamoDB!

---

Stuart Rimel <[srimel@pdx.edu](mailto:srimel@pdx.edu)>  
signed on 2023-11-14 21:59:33.814294  
Hello API Gateway from local HTML!

Data type of JSON response is a list of dicts.

```

>>> resp_json = resp.json()
>>> for k, v in resp_json[0].items():
...     print(f'{k} ... {v}')
...
name ... Stuart Rimel
email ... srimel@pdx.edu
date ... 2023-10-30 03:24:07.255408+00:00
message ... Hello Cloud Shell!
>>> Odin = srimel

```

## 8.2g.12: Test the API via Python Requests (POST)







```


>>> mydict = {
...     'name': 'Stuart Rimel',
...     'email': 'srimel@pdx.edu',
...     'message': 'Hello from python interpetor!'
... }
>>> resp = requests.post('https://gbapigw-bl9e8835.uc.gateway.dev/entry', json=mydict)
>>> resp_json = resp.json()
>>> for k, v in resp_json[0].items():
...     print(f'{k} ... {v}')
...
{k} ... {v}
{k} ... {v}
{k} ... {v}
{k} ... {v}
>>> for k, v in resp_json[0].items():
...     print(f'{k} ... {v}')
...
name ... Stuart Rimel
email ... srimel@pdx.edu
date ... 2023-10-30 03:24:07.255408+00:00
message ... Hello Cloud Shell!
>>> 


```



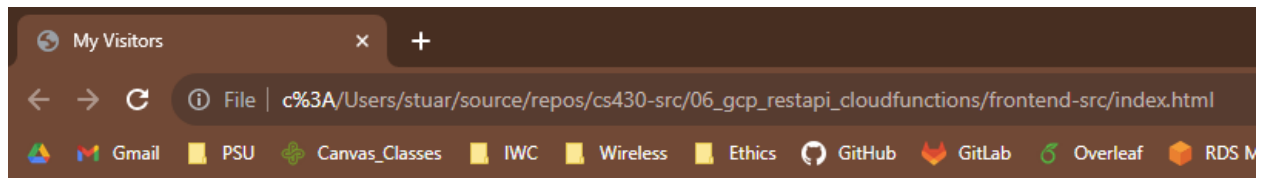
## 8.2g.15: Version #1: Local file system

Name	Status	Type	Initiator
 index.html	200	document	Other
 style.css	200	stylesheet	<a href="#">index.html:5</a>
 guestbook.js	200	script	<a href="#">index.html:6</a>
 entries	200	preflight	Preflight 
 entries	200	fetch	<a href="#">guestbook.js:68</a>

 Odin

File Edit View 

Odin: srimel|



Stuart Rimel <srimel@pdx.edu>  
signed on 2023-11-15 07:32:10.580556+00:00  
Hello API Gateway from local SPA!

---

## 8.2g.16: Version #2: Google Cloud Storage bucket

My Visitors x +

← → ↻ 🔒 storage.googleapis.com/gbapi-srimel/index.html 🔗 ☆

📧 Gmail 📁 PSU 🌐 Canvas\_Classes 📁 IWC 📁 Wireless 📁 Ethics 🔄 GitHub 🦊 Git

# Guestbook

**Name:**

**Email:**

**Message:**

## Entries

Hello App Engine!

---

Stuart Rimel <srimel@pdx.edu>  
signed on 2023-11-15 07:40:38.781988+00:00  
Hello API Gateway from SPA in GCS!

---

Stuart Rimel <srimel@pdx.edu>

## 8.3g: OAuth2 Guestbook

Service URL: <https://gcp-oauth-gb-syj2dyiavq-uw.a.run.app>

Client ID: 908286328049-tsub5566b79akpshjalce0gtsniol1sq.apps.googleusercontent.com

Client Secret: GOCSPX-ue3rlx-gM\_bkaSPFu--gj8-aXpFw

### 8.3g.14: Visit the application

The screenshot shows a web browser window with the Google sign-in page. The page title is "Sign in - Google Accounts". The URL bar shows the address: `accounts.google.com/v3/signin/identifier?opparams=%253F&dsh=S185556...`. The page content includes a "Sign in" button, a "Forgot email?" link, and a "Next" button. The Chrome DevTools Network tab is open, showing a list of requests. The selected request is "sign", which is a GET request to the URL `https://gcp-oauth-gb-syj2dyiavq-uw.a.run.app/sign`. The status code is 302 Found. The response headers show the location: `https://accounts.google.com/o/oauth2/`.

Sign in with Google

Sign in

to continue to

[gcp-oauth-gb-syj2dyiavq-uw.a.run.app](https://gcp-oauth-gb-syj2dyiavq-uw.a.run.app)

Email or phone

[Forgot email?](#)

To continue, Google will share your name, email address, language preference, and profile picture with [gcp-oauth-gb-syj2dyiavq-uw.a.run.app](https://gcp-oauth-gb-syj2dyiavq-uw.a.run.app).

[Create account](#) [Next](#)

Network

Filter

Preserve log ☒ Disable cache No throttling

Blocked response cookies ☐ Blocked requests ☐ 3rd-party requests

20000 ms 40000 ms 60000 ms 80000 ms 100000 ms 120000 ms 140000 ms

Name

sign

auth?response\_ty...

identifier?oppara...

m=\_b,\_tp

data:image/svg+x...

KFOmCnqEu92Fr1...

4UaGrENHsxJGDu...

KFOICnqEu92Fr1...

4UabrENHsxJGDu...

m=byfTOb,IsjVmc...

m=n73qwf,SCuOP...

m=ltDFwf,Rusgnf...

m=RqjULd

m=7wDk9d RMhRfe

33 requests 575 kB tra

Headers

General

Request URL: `https://gcp-oauth-gb-syj2dyiavq-uw.a.run.app/sign`

Request Method: GET

Status Code: 302 Found

Remote Address: 216.239.38.53:443

Referrer Policy: strict-origin-when-cross-origin

Response Headers

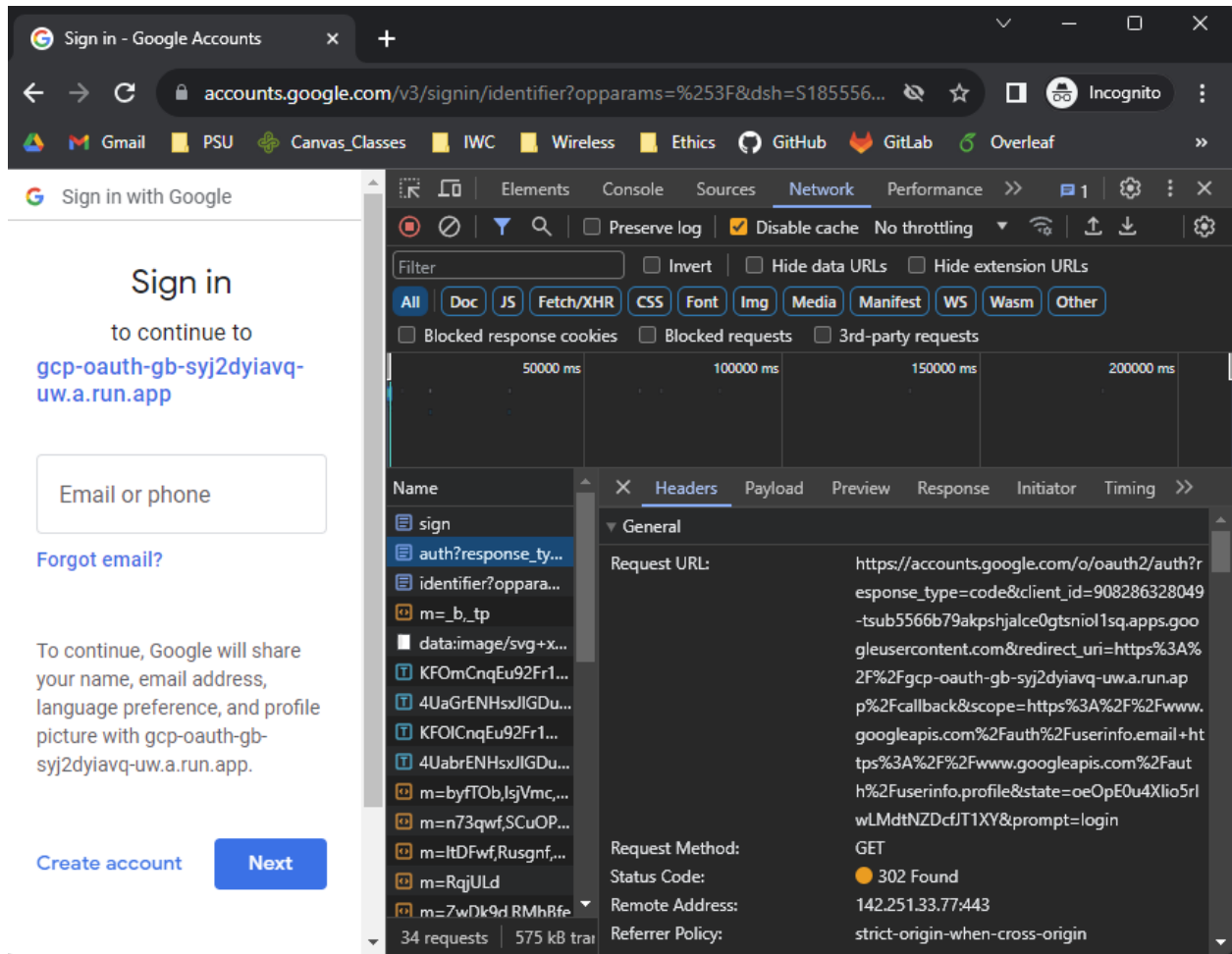
Alt-Svc: `h3="443"; ma=2592000,h3-29="443"; ma=2592000`

Content-Length: 1007

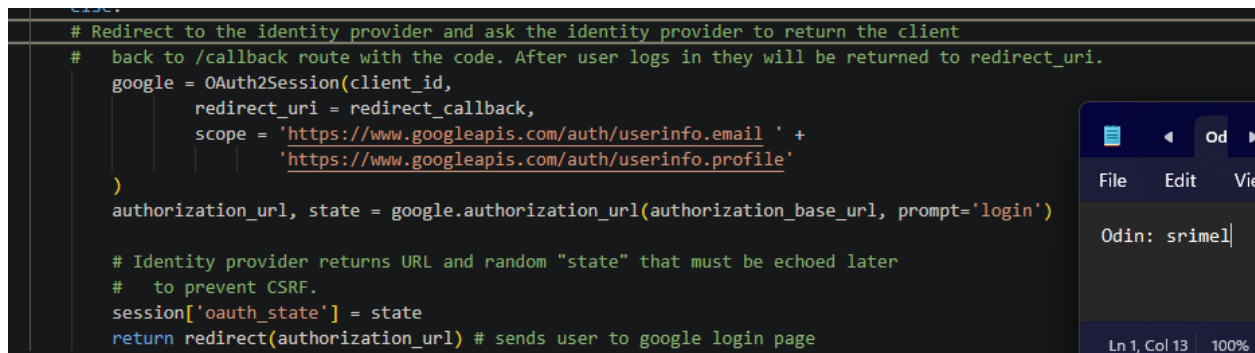
Content-Type: text/html; charset=utf-8

Date: Fri, 17 Nov 2023 08:48:22 GMT

Location: `https://accounts.google.com/o/oauth2/`

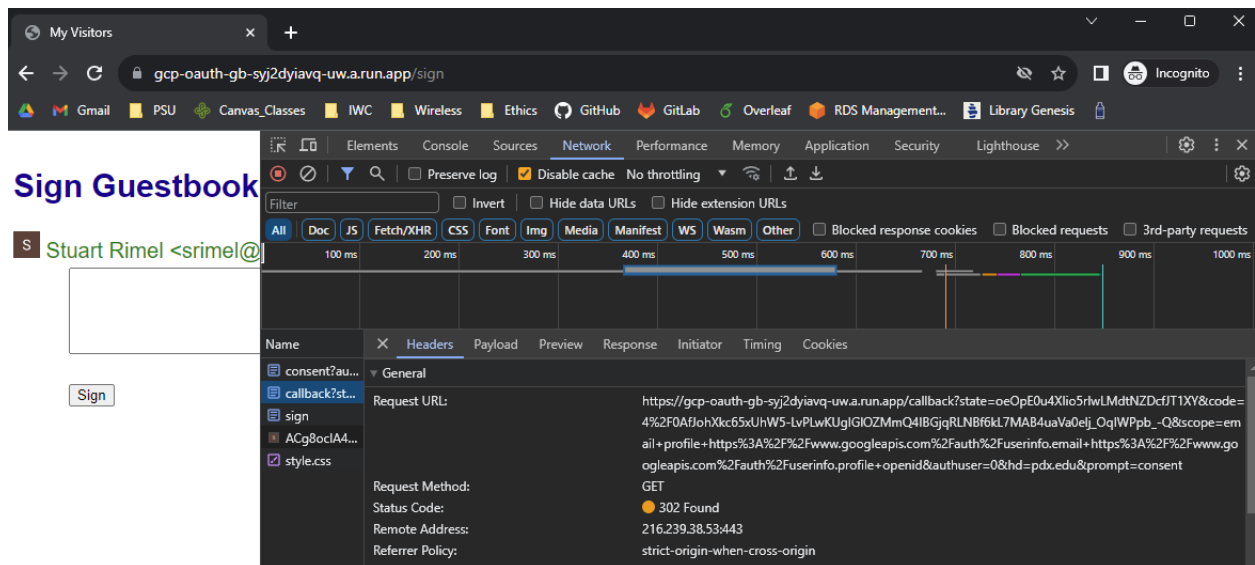
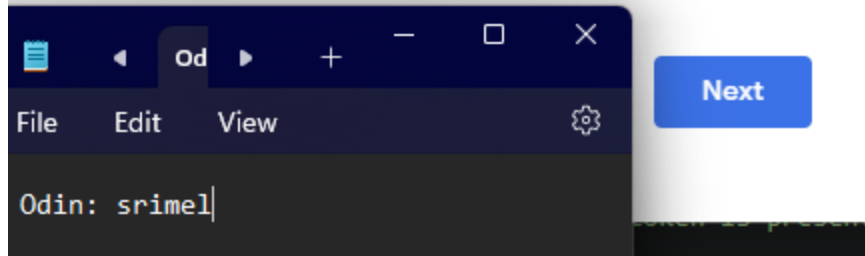


Responsible lines of code for the second request:



Permissions being granted:

To continue, Google will share your name, email address, language preference, and profile picture with gcp-oauth-gb-syj2dyiavq-uw.a.run.app.



URI for the location that the user was sent to by the callback:

[https://gcp-oauth-gb-syj2dyiavq-uw.a.run.app/callback?state=oeOpE0u4Xlio5rlwLMdtNZDcfJT1XY&code=4%2F0AfJohXkc65xUhW5-LvPLwKUgIGIOZMmQ4IBGjqRLNBf6kL7MAB4uaVa0elj\\_OqIWPpb\\_-Q&scope=email+profile+https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fuserinfo.email+https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fuserinfo.profile+openid&authuser=0&hd=pxd.edu&prompt=consent](https://gcp-oauth-gb-syj2dyiavq-uw.a.run.app/callback?state=oeOpE0u4Xlio5rlwLMdtNZDcfJT1XY&code=4%2F0AfJohXkc65xUhW5-LvPLwKUgIGIOZMmQ4IBGjqRLNBf6kL7MAB4uaVa0elj_OqIWPpb_-Q&scope=email+profile+https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fuserinfo.email+https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fuserinfo.profile+openid&authuser=0&hd=pxd.edu&prompt=consent)

Request for profile image:

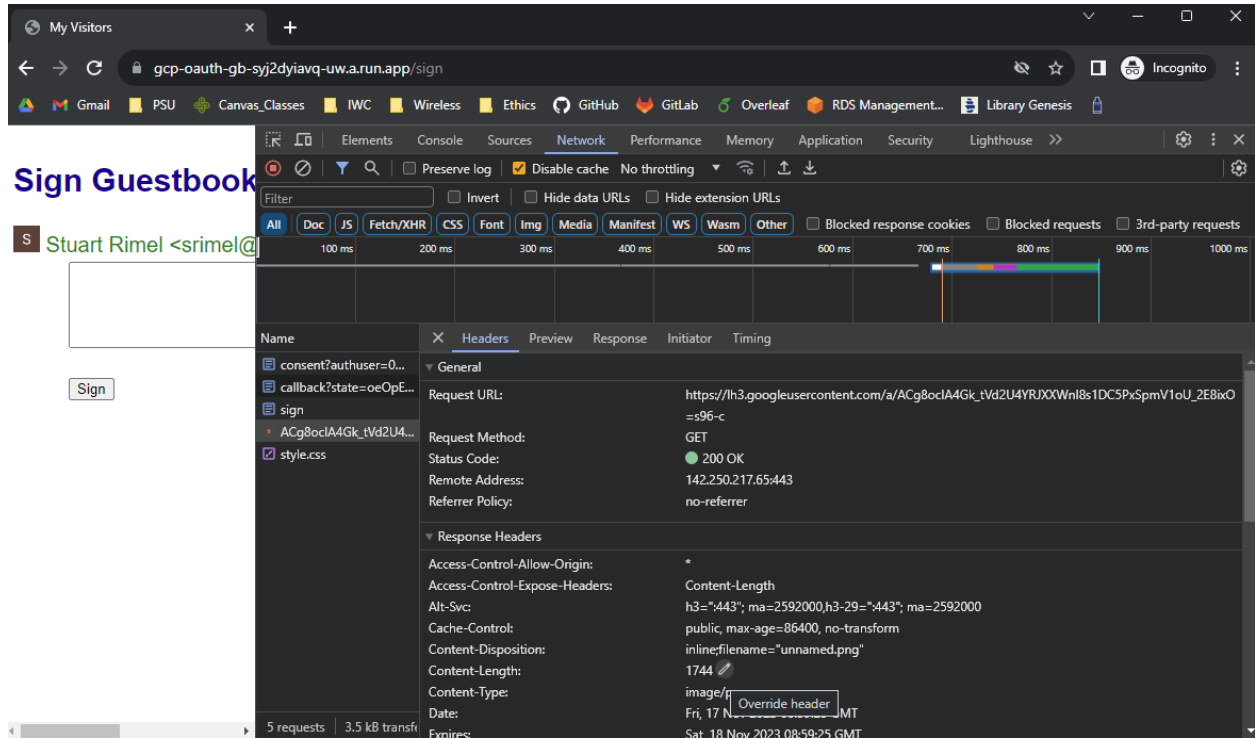
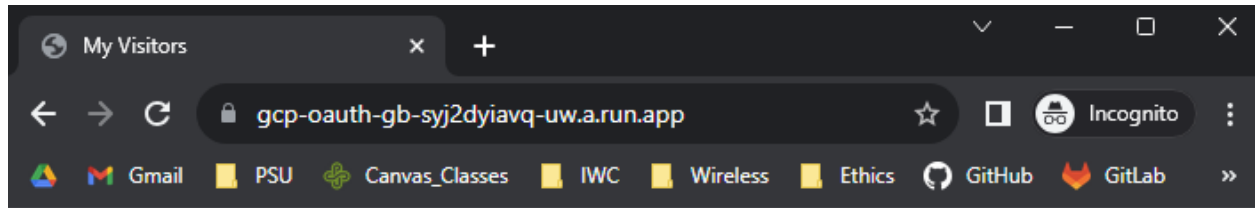


Image Url:

[https://lh3.googleusercontent.com/a/ACg8ocIA4Gk\\_tVd2U4YRjXXWnl8s1DC5PxSpmV1oU\\_2E8ixO=s96-c](https://lh3.googleusercontent.com/a/ACg8ocIA4Gk_tVd2U4YRjXXWnl8s1DC5PxSpmV1oU_2E8ixO=s96-c)


## 8.3g.15: Secrets manager deployment




### Guestbook

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

#### Entries

 Stuart Rimel <srime1@pdx.edu>  
on 2023-11-17 09:13:05.125355+00:00  
Hello from Oauth2 deployed cloud run!

---

 Stuart Rimel <srime1@pdx.edu>  
on 2023-11-17 09:24:07.514977+00:00  
Hello secrets manager!

---

## 8.3g.16: Removing access

The screenshot shows a web browser window with the address bar displaying `myaccount.google.com/connections/details/ChMaEQoM...`. The browser's bookmark bar includes links to Gmail, PSU, Canvas\_Classes, IWC, Wireless, Ethics, GitHub, and GitLab. The page title is "How Google helps you sign in to Guestbook".

The main content area is titled "Sign in with Google" and explains that Google uses the user's name, email address, and profile picture to securely sign them in. It includes a link to "Learn more".

Below this, it shows "Access given on: 31 minutes ago" and "Access given to: gcp-oauth-gb-syj2dyiavq-uw.a.run.app".

A section titled "If you stop using Sign in with Google" states that if Guestbook uses automatic sign-in, Google will no longer automatically sign the user in. A blue button labeled "Stop using Sign in with Google" is present.

At the bottom, a note states: "Guestbook uses Google Account sign-in prompts to offer a faster way to sign in. To make changes, go to [Settings](#)".

In the bottom right corner, a small terminal window is visible with the text "Odin: srime1".

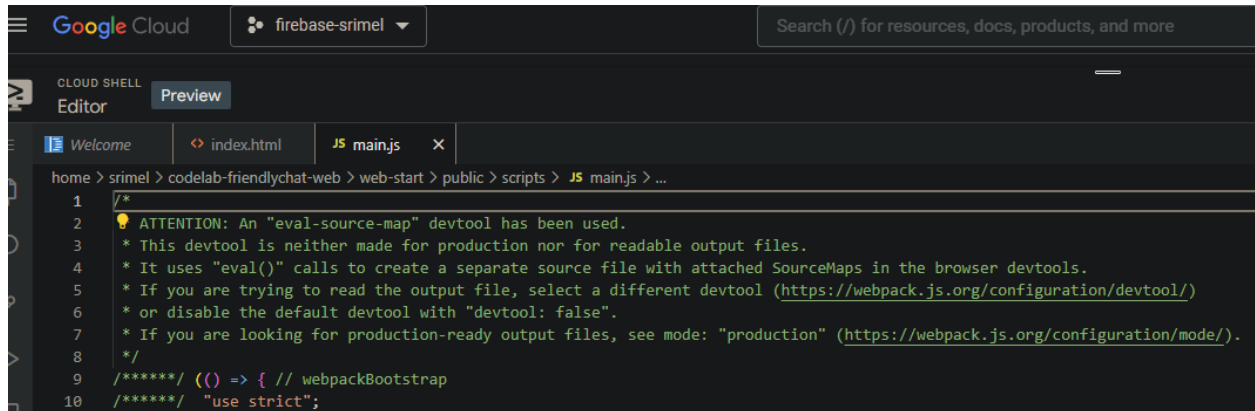
## 8.4g: Firebase



## 8.4g.4: Authentication setup

Other domains given access: firebase, localhost

## 8.4g.8: Bundling with Webpack



The screenshot shows the Google Cloud Shell Editor interface. At the top, there's a search bar with the text "Search (/) for resources, docs, products, and more". Below that, the "CLOUD SHELL Editor" is visible with a "Preview" button. The editor has tabs for "Welcome", "index.html", and "JS main.js". The "JS main.js" tab is active, showing a warning message from Webpack DevTools. The warning text is as follows:

```
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";
```

## 8.4g.12: Add authentication

Authentication missing functions: signIn, initFirebaseAuth, signOutUser

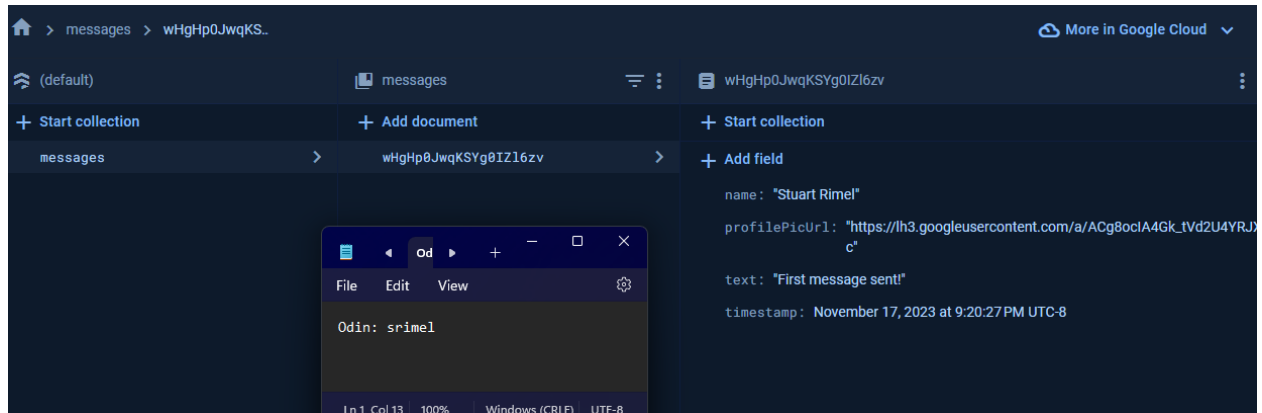
Send/Receive message missing functions: saveMessage, loadMessages, saveImageMessage, saveMessagingDeviceToken

## 8.4g.13: Update UI

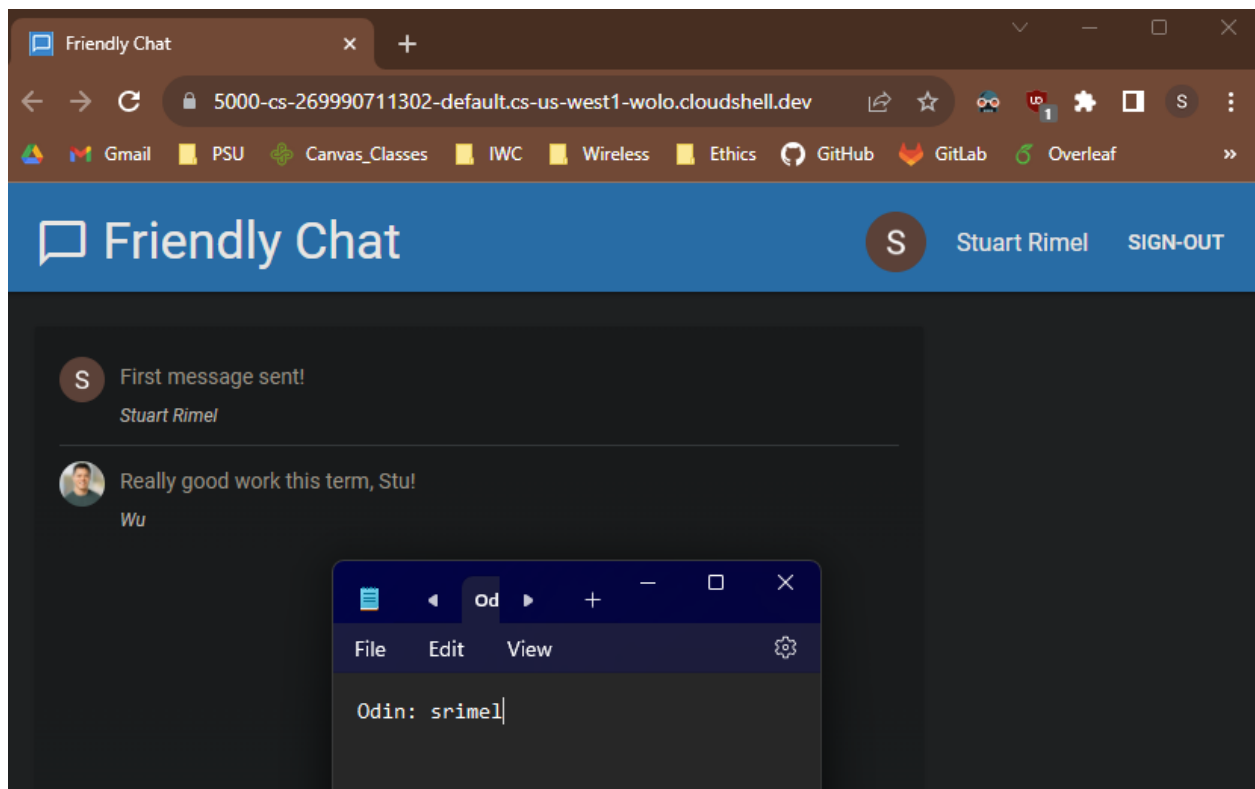
Names of elements that are hidden: userName, userPic, signOutButton

Name of element not hidden: signInButton

## 8.4g.16: Test application with text messaging



## 8.4g.17: Manual message insertion



## 8.4g.18: Add image messaging

URL of image that is first shown in UI as message is loading:

<https://www.google.com/images/spin-32.gif?a>

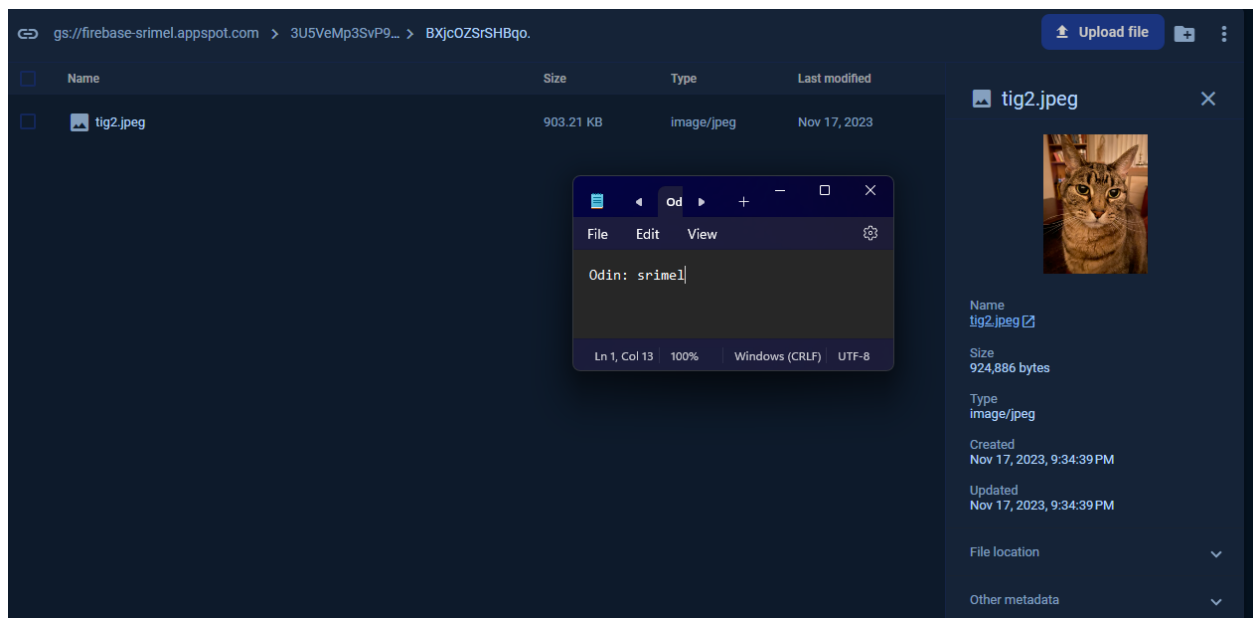
## 8.4g.19: Test application with image messaging

Difference between fields: there is an imageUrl field instead of a text field, there is also a storageUri field

Image URL:

<https://firebasestorage.googleapis.com/v0/b/firebase-srimel.appspot.com/o/3U5VeMp3SvP9zIAQLv6kyJ7nrMz1%2FBXjcOZSrSHBqowJOtyd7%2Ftig2.jpeg?alt=media&token=c439e8c3-a572-4b29-9d54-5b3d96d05e19>

Storage location: 3U5VeMp3SvP9zIAQLv6kyJ7nrMz1/BXjcOZSrSHBqowJOtyd7/tig2.jpeg



## 8.4g.20: Deploy application

Directory app is served from: public/

Friendly Chat

+

← → ↺

fir-srimel.web.app


🔗 ☆ 🧑 2 ⚙️ ⬇️ 🖨️ S ⋮


Gmail PSU Canvas\_Classes IWC Wireless Ethics GitHub GitLab Overleaf >>

Friendly Chat


S Stuart Rimel SIGN-OUT

S First message sent!  
Stuart Rimel


 Really good work this term, Stu!  
Wu

S   
Stuart Rimel

S test  
Stuart Rimel

 What's upp! This seems like a friendly place to chat :P  
Peter Wells

S Thanks for signing Pete!  
Stuart Rimel

Message... SEND 

Od

File Edit View ⚙️

Odin: srimel|

Ln 1, Col 13 | 100% | Windows (CRLF) | UTF-8