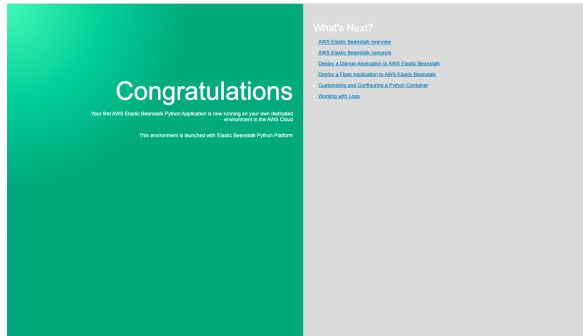


Max Huecksteadt

CS 530

Week 6 Lab

1.

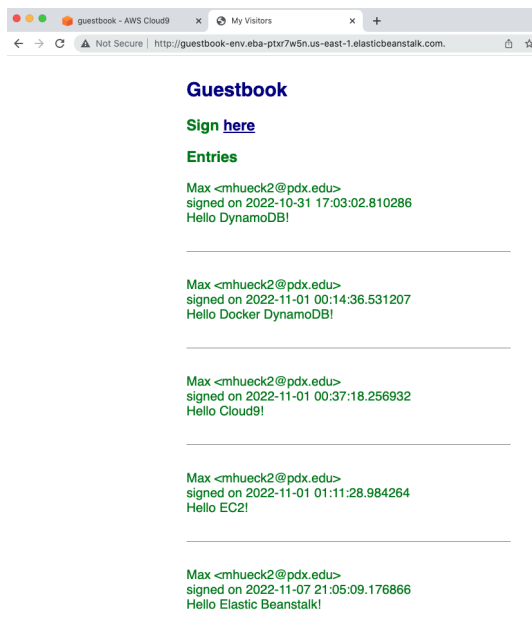


2.

Instances (3) [Info](#) [Refresh](#) [Connect](#) [Instance state](#) [Actions](#) [Launch Instances](#)

<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Pub
<input type="checkbox"/>	Ebhelloworld-env	i-064eabe5526b68d3b	Terminated	t2.micro	-	No alarms +	us-east-1b	-	-
<input type="checkbox"/>	Ebhelloworld-env	i-017343ffed85d5af6	Pending	t2.micro	-	No alarms +	us-east-1b	ec2-3-93-1-83.compute...	3.93
<input type="checkbox"/>	Ebhelloworld-env	i-03af2d65b0560897e	Running	t2.micro	2/2 checks passed	No alarms +	us-east-1c	ec2-44-199-235-184.co...	44.1

3.



4.

Instances (4) Info

Refresh

Connect

Instance state

Actions

Launch Instances

Find Instance by attribute or tag (case-sensitive)

< 1 >

Instance state = running

Clear filters

<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check
<input type="checkbox"/>	guestbook-env	i-09c1d87deddc98007	Running	t2.micro	2/2 checks pa
<input type="checkbox"/>	aws-cloud9-g...	i-0501470fe9a0773ea	Running	t2.micro	2/2 checks pa
<input type="checkbox"/>	guestbook-env	i-0bf03397eee926f3c	Running	t2.micro	2/2 checks pa
<input type="checkbox"/>	guestbook-env	i-0cef002c04d315144	Running	t2.micro	2/2 checks pa

5.

IAM - IAM & Admin - cloud-H...

My Visitors

https://cloud-huecksteadt-mhueck2.uw.r.appspot.com

Guestbook

Sign here

Entries

Max <mhueck2@pdx.edu>
signed on 2022-11-01 02:04:35.549276+00:00
Hello Cloud Shell!

Max <mhueck2@pdx.edu>
signed on 2022-10-31 18:40:42.558900+00:00
Hello Datastore!

Max <mhueck2@pdx.edu>
signed on 2022-11-01 01:54:09.868510+00:00
Hello Docker Datastore!

Max <mhueck2@pdx.edu>
signed on 2022-11-07 21:49:28.178984+00:00
Hello App Engine!

Max <mhueck2@pdx.edu>
signed on 2022-11-01 02:14:28.673399+00:00
Hello Compute Engine!

6.

Instances ?

<input type="checkbox"/>	ID ↑	QPS ?	Latency ?	Request
<input type="checkbox"/>	00c61b117c499aed6731bb8d5502943	0	0 ms	
<input type="checkbox"/>	00c61b117c6b83caaccd87902bcecad	0	0 ms	

7.

Welcome - cloud-huecksteadt Oregon CTF

Toggle navigation

Portland State University Computer Science

Oregon CTF

Capture-the-Flag security games and codelabs

Ones we've developed:

- Computer Systems Programming (CS 201) [CTF](#)
- Malware Reverse Engineering (CS 492) [CTF](#)
- angr Symbolic Execution (CS 492) [CTF](#)
- Cloud Security (CS 430/495) [Thunder CTF](#)
- Fuzzing (CS 492) [codelab](#)
- Smart contract symbolic execution (CS 410) [codelabs](#)
- Divergent Cryptography and Security (CyberPDX camp) [CTF](#)

Ones we like to teach from:

- bandit (Linux tools) [CTF](#)
- natas (Web Security) [CTF](#)
- PortSwigger (Web Security) [CTF](#)
- OWASP Damn Vulnerable NodeJS Application (Web Security) [CTF](#)
- flaws.cloud (Cloud Security) [v1 v2](#)
- CloudGoat (Cloud Security) [exercises](#)
- Microcorruption (Reverse Engineering) [CTF](#)
- Security Innovation (Ethereum) [CTF](#)
- Ethernaut (Ethereum) [CTF](#)
- CryptoPals (Cryptography) [CTF](#)

Portland State's CTF Slack channel [here](#)

Resources

Some recommended resources include:

- Download a Windows XP VM with IDA Pro Free installed [here](#)
- Or download IDA Pro Free [here](#)
- Download a Linux OS Box [here](#)
- PSU's CS 201 Computer Systems Programming [course](#)
- PSU's CS 430 Internet, Web, and Cloud Systems [course](#)
- PSU's CS 495 Web and Cloud Security [course](#)
- PSU's CS 492 Malware Reverse Engineering [course](#)
- PSU's CS 410 Blockchain Development and Security [course](#)

Passing in the proxy route as an environment variable allows the proxy route to be specified at the instantiation of the container, as opposed to being stored somewhere more permanent like a file.

secret-proxy

gcr.io > cloud-huecksteadt-mhueck2 > secret-proxy

Filter Enter property name or value

Name	Tags	Virtual Size	Created	Uploaded
430c444cc46e	latest	50.1 MB	1 minute ago	1 minute ago

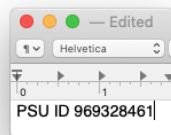
9.

Images - Container Registry

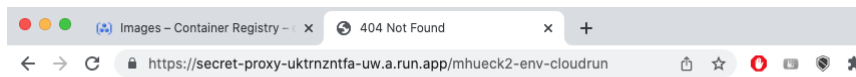
https://secret-proxy-uktrznntfa-uw.a.run.app/mhueck2-env-cloudrun

Proxy

Enter URL to access by proxy:



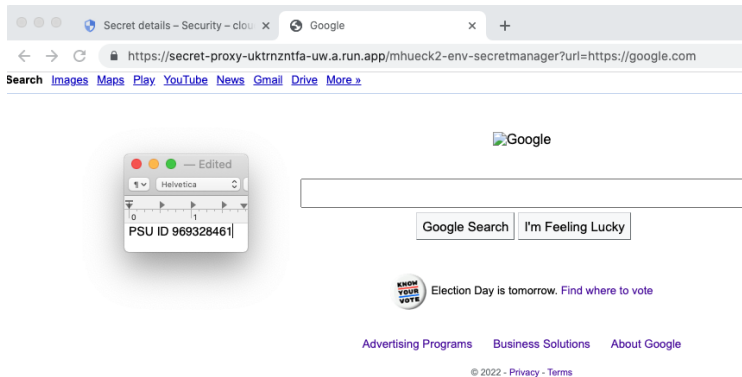
10.



Not Found

The requested URL was not found on the server. If you entered the URL manually please check your spelling and try again.

11.



12. Google prevented a SSRF 'attack' by myself, essentially me posing as the google machine to serve a metadata request, which I could use to get access to sensitive information. However, Google prevented this by changing the metadata access requirements.

13.

✓ Successful: 21ed16ea

Started on Nov 7, 2022, 5:46:22 PM

Source

[gs://cloud-huecksteadt-mhueck2-cloudbuild/source/1667871972.185665-990f8b65ecf8420790a07f977934d0b0.tgz](https://cloud-huecksteadt-mhueck2-cloudbuild/source/1667871972.185665-990f8b65ecf8420790a07f977934d0b0.tgz)

Steps	Duration	BUILD LOG	EXECUTION DETAILS	BUILD ARTIFACTS
✓ Build Summ... 1 Step	00:04:24	<div><input type="checkbox"/> Wrap lines</div> <div><input type="checkbox"/> Show newest entries first</div>		
0: gor.io/cloud... build--networ...	00:01:31	<div>183 2928aacb59bd: Preparing</div> <div>184 fd39d96c4074: Preparing</div> <div>185 10b0632b29bb: Preparing</div> <div>186 e6928faba763: Preparing</div> <div>187 46c9177b0c1c: Preparing</div> <div>188 13c498b46ec8: Preparing</div> <div>189 cd84ba3b2c65: Preparing</div> <div>190 da9f4ac1cb95: Preparing</div> <div>191 d9d07d703dd5: Preparing</div> <div>192 46c9177b0c1c: Waiting</div> <div>193 13c498b46ec8: Waiting</div> <div>194 cd84ba3b2c65: Waiting</div> <div>195 da9f4ac1cb95: Waiting</div> <div>196 d9d07d703dd5: Waiting</div> <div>197 fd39d96c4074: Layer already exists</div> <div>198 10b0632b29bb: Layer already exists</div> <div>199 e6928faba763: Layer already exists</div> <div>200 46c9177b0c1c: Layer already exists</div> <div>201 cd84ba3b2c65: Layer already exists</div> <div>202 d9d07d703dd5: Layer already exists</div> <div>203 2928aacb59bd: Pushed</div> <div>204 da9f4ac1cb95: Pushed</div> <div>205 d9904947e60b: Pushed</div> <div>206 13c498b46ec8: Pushed</div> <div>207 latest: digest: sha256:2cfff5bc9f19c54eb6ce27d71486dfb4785aa290b5ae1</div> <div>208 DONE</div>		

14.

gcp_gb

gcr.io > cloud-huecksteadt-mhueck2 > gcp_gb

Filter Enter property name or value					
<input type="checkbox"/>	Name	Tags	Virtual Size	Created	Uploaded
<input type="checkbox"/>	2cff5bc9f19c	latest	1.1 GB	6 minutes ago	3 minutes ago

15.

artifacts...pspot.com - Bucke... x My Visitors x +

https://gcpgb-uktrnzntfa-uw.a.run.app

Guestbook

[Sign here](#)

Entries

Max <mhueck2@pdx.edu>
signed on 2022-11-01 02:04:35.549276+00:00
Hello Cloud Shell!

Max <mhueck2@pdx.edu>
signed on 2022-10-31 18:40:42.558900+00:00
Hello Datastore!

Max <mhueck2@pdx.edu>
signed on 2022-11-08 01:59:38.667331+00:00
Hello Cloud Run!

16.

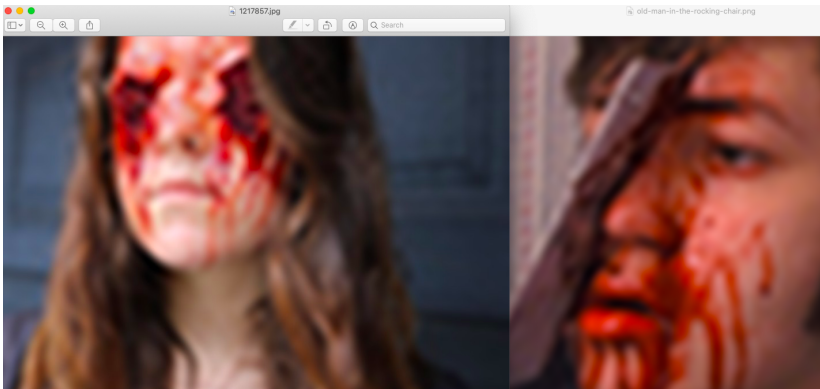
- What port do container instances listen on?

8080

- What are the maximum number of instances Cloud Run will autoscale up to for your service?
- 100

17.

- After downloading the file from the bucket, where is it stored? In a temporary file with a unique id, (via mkstemp()).
- What class in the ImageMagick package is used to do the blurring of the file? The resize class (image.resize)
- What lines of code perform the blurring of the image and its storage back into the filesystem? 72-74



18.

```
LEVEL: I
NAME: blur_offensive_images
EXECUTION_ID: p6d4rk2yqifn
TIME.UTC: 2022-11-08 02:30:32.320
LOG: Blurred image uploaded to: gs://maxsbigimagebucket/1217857.jpg

LEVEL: I
NAME: blur_offensive_images
EXECUTION_ID: p6d4rk2yqifn
TIME.UTC: 2022-11-08 02:30:30.785
LOG:

LEVEL: I
NAME: blur_offensive_images
EXECUTION_ID: p6d4rk2yqifn
TIME.UTC: 2022-11-08 02:30:30.785
LOG: Image 1217857.jpg was blurred.

LEVEL: I
NAME: blur_offensive_images
EXECUTION_ID: p6d4rk2yqifn
TIME.UTC: 2022-11-08 02:30:24.097
LOG:

LEVEL: I
NAME: blur_offensive_images
EXECUTION_ID: p6d4rk2yqifn
TIME.UTC: 2022-11-08 02:30:24.097
LOG: Image 1217857.jpg was downloaded to /tmp/tmpqsgwx341.
```

19.