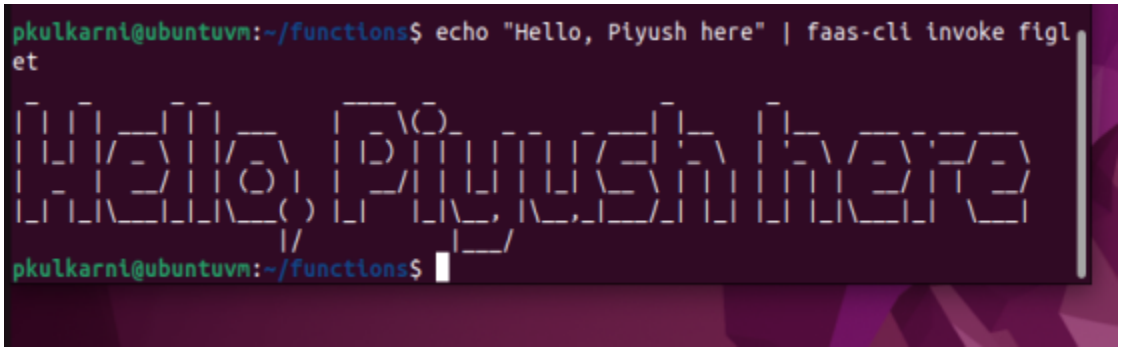
COEN 241
Cloud Computing
HOMEWORK-2
YOUR OWN SERVERLESS INFRASTRUCTURE
REPORT - SCREENSHOTS

Piyush Kulkarni
ID: 1629006

—

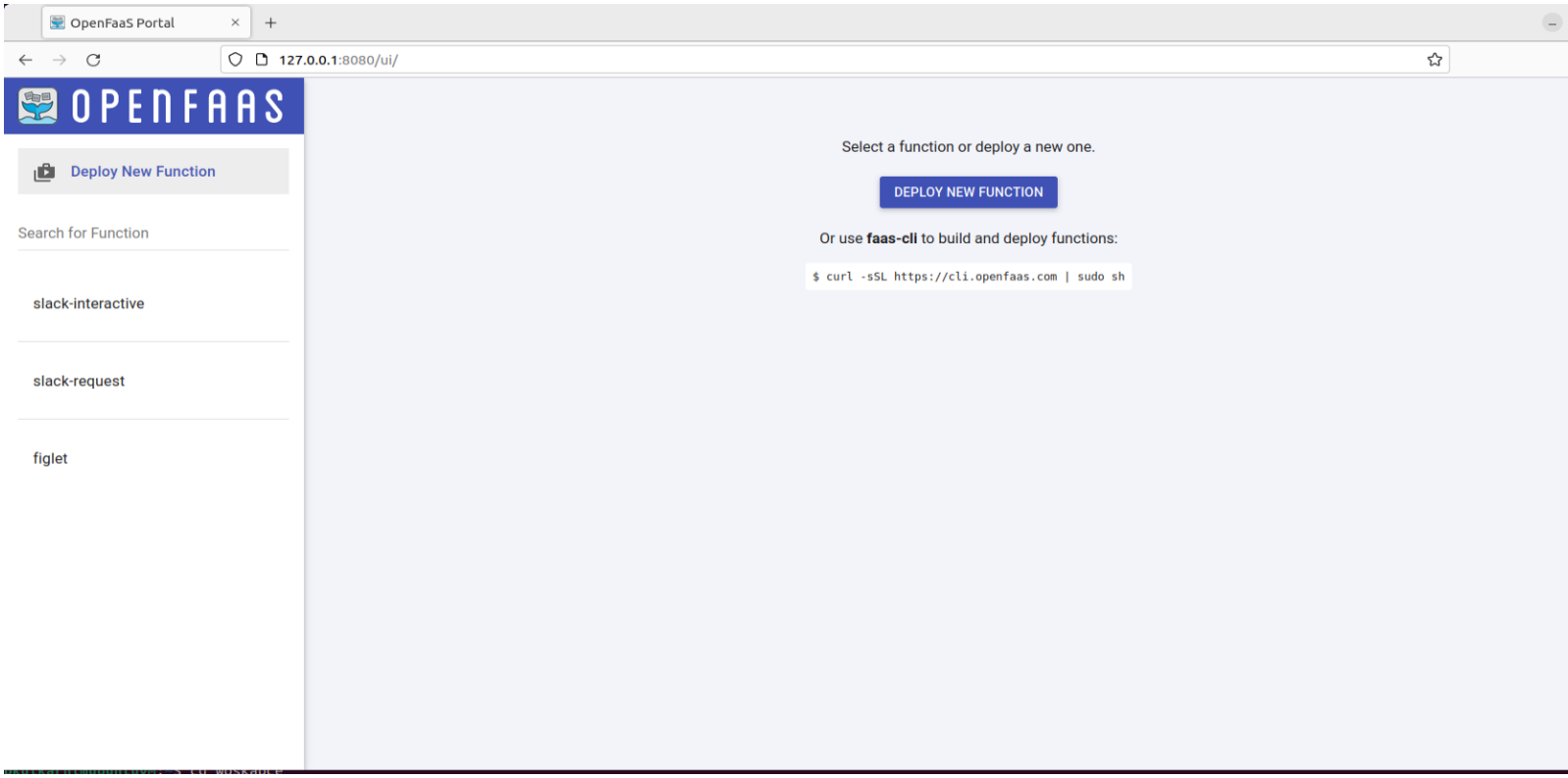
Invoking figlet function



sudo journalctl -u faasd --lines 40

```
^C
pkulkarni@ubuntuvm:~/functions/slack-request$ sudo journalctl -u faasd --lines 40
Nov 08 15:21:08 ubuntuvm faasd[4777]: 2022/11/08 15:21:08 - gateway
Nov 08 15:21:08 ubuntuvm faasd[4777]: 2022/11/08 15:21:08 - queue-worker
Nov 08 15:21:08 ubuntuvm faasd[4777]: Starting: basic-auth-plugin
Nov 08 15:21:08 ubuntuvm faasd[4777]: 2022/11/08 15:21:08 Created container: basic-auth-plugin
Nov 08 15:21:10 ubuntuvm faasd[4777]: 2022/11/08 15:21:10 basic-auth-plugin has IP: 10.62.0.2
Nov 08 15:21:10 ubuntuvm faasd[4777]: 2022/11/08 15:21:10 Task: basic-auth-plugin        Container: basic-auth-plugin
Nov 08 15:21:10 ubuntuvm faasd[4777]: Starting: nats
Nov 08 15:21:10 ubuntuvm faasd[4777]: Creating local directory: /var/lib/faasd/nats
Nov 08 15:21:10 ubuntuvm faasd[4777]: 2022/11/08 15:21:10 Running nats with user: "65534"
Nov 08 15:21:11 ubuntuvm faasd[4777]: 2022/11/08 15:21:11 Created container: nats
Nov 08 15:21:11 ubuntuvm faasd[4777]: 2022/11/08 15:21:11 nats has IP: 10.62.0.3
Nov 08 15:21:11 ubuntuvm faasd[4777]: 2022/11/08 15:21:11 Task: nats        Container: nats
Nov 08 15:21:11 ubuntuvm faasd[4777]: Starting: prometheus
Nov 08 15:21:11 ubuntuvm faasd[4777]: Creating local directory: /var/lib/faasd/prometheus
Nov 08 15:21:11 ubuntuvm faasd[4777]: 2022/11/08 15:21:11 Running prometheus with user: "65534"
Nov 08 15:21:12 ubuntuvm faasd[4777]: 2022/11/08 15:21:12 Created container: prometheus
Nov 08 15:21:13 ubuntuvm faasd[4777]: 2022/11/08 15:21:13 prometheus has IP: 10.62.0.4
Nov 08 15:21:13 ubuntuvm faasd[4777]: 2022/11/08 15:21:13 Task: prometheus        Container: prometheus
Nov 08 15:21:13 ubuntuvm faasd[4777]: Starting: gateway
Nov 08 15:21:13 ubuntuvm faasd[4777]: 2022/11/08 15:21:13 Created container: gateway
Nov 08 15:21:14 ubuntuvm faasd[4777]: 2022/11/08 15:21:14 gateway has IP: 10.62.0.5
Nov 08 15:21:14 ubuntuvm faasd[4777]: 2022/11/08 15:21:14 Task: gateway        Container: gateway
Nov 08 15:21:14 ubuntuvm faasd[4777]: Starting: queue-worker
Nov 08 15:21:16 ubuntuvm faasd[4777]: 2022/11/08 15:21:16 Created container: queue-worker
Nov 08 15:21:16 ubuntuvm faasd[4777]: 2022/11/08 15:21:16 queue-worker has IP: 10.62.0.6
Nov 08 15:21:16 ubuntuvm faasd[4777]: 2022/11/08 15:21:16 Task: queue-worker        Container: queue-worker
Nov 08 15:21:16 ubuntuvm faasd[4777]: 2022/11/08 15:21:16 Supervisor init done in: 50 seconds
Nov 08 15:21:16 ubuntuvm faasd[4777]: 2022/11/08 15:21:16 Looking up IP for: "prometheus"
Nov 08 15:21:16 ubuntuvm faasd[4777]: 2022/11/08 15:21:16 Looking up IP for: "gateway"
Nov 08 15:21:16 ubuntuvm faasd[4777]: 2022/11/08 15:21:16 Resolver rebuilding map
Nov 08 15:21:16 ubuntuvm faasd[4777]: 2022/11/08 15:21:16 Resolver: "localhost"="127.0.0.1"
lines 1-31...skipping...
Nov 08 15:21:08 ubuntuvm faasd[4777]: 2022/11/08 15:21:08 - gateway
Nov 08 15:21:08 ubuntuvm faasd[4777]: 2022/11/08 15:21:08 - queue-worker
Nov 08 15:21:08 ubuntuvm faasd[4777]: Starting: basic-auth-plugin
Nov 08 15:21:08 ubuntuvm faasd[4777]: 2022/11/08 15:21:08 Created container: basic-auth-plugin
Nov 08 15:21:10 ubuntuvm faasd[4777]: 2022/11/08 15:21:10 basic-auth-plugin has IP: 10.62.0.2
Nov 08 15:21:10 ubuntuvm faasd[4777]: 2022/11/08 15:21:10 Task: basic-auth-plugin        Container: basic-auth-plugin
Nov 08 15:21:10 ubuntuvm faasd[4777]: Starting: nats
Nov 08 15:21:10 ubuntuvm faasd[4777]: Creating local directory: /var/lib/faasd/nats
Nov 08 15:21:10 ubuntuvm faasd[4777]: 2022/11/08 15:21:10 Running nats with user: "65534"
Nov 08 15:21:11 ubuntuvm faasd[4777]: 2022/11/08 15:21:11 Created container: nats
Nov 08 15:21:11 ubuntuvm faasd[4777]: 2022/11/08 15:21:11 nats has IP: 10.62.0.3
Nov 08 15:21:11 ubuntuvm faasd[4777]: 2022/11/08 15:21:11 Task: nats        Container: nats
Nov 08 15:21:11 ubuntuvm faasd[4777]: Starting: prometheus
Nov 08 15:21:11 ubuntuvm faasd[4777]: Creating local directory: /var/lib/faasd/prometheus
Nov 08 15:21:11 ubuntuvm faasd[4777]: 2022/11/08 15:21:11 Running prometheus with user: "65534"
Nov 08 15:21:12 ubuntuvm faasd[4777]: 2022/11/08 15:21:12 Created container: prometheus
Nov 08 15:21:13 ubuntuvm faasd[4777]: 2022/11/08 15:21:13 prometheus has IP: 10.62.0.4
```

OpenFAAS Gateway after deploying all three functions



Invoking slack interactive

```
pkulkarni@ubuntuvm:~/functions$ faas-cli invoke slack-interactive
Reading from STDIN - hit (Control + D) to stop.
{"attachments": [{"footer": "Slack Apps built on OpenFaas", "author_link": "https;//github.com/pikulkarni7/COEN241_1629
006.git", "color": "#36a64f", "text": "Head over to COEN 241", "title": "COEN 241", "ts": 123456789, "author_name": "",
 "title_link": "https://www.scu.edu/engineering/academic-programs/department-of-computer-engineering/graduate/course-de
scriptions/", "image_url": "https://www.scu.edu/media/offices/umc/scu-brand-guidelines/visual-identity-amp-photography/
visual-identity-toolkit/logos-amp-seals/Mission-Dont3.png", "response_type": "ephemeral", "replace_original": true, "fo
oter_icon": "https://a.slack-edge.com/45901/marketing/img/_rebrand/meta/slack_hash_256.png", "pretext": "Ahh yeah! Grea
t choice, COEN 241 is absolutely amazing!", "fallback": "Required plain-text summary of the attachment.", "thumb_url":
"https://www.scu.edu/engineering/academic-programs/department-of-computer-engineering/graduate/course-descriptions/", "
author_icon": "https://github.com/pikulkarni7.png"}]}
pkulkarni@ubuntuvm:~/functions$ curl -d '{"Hello":"COEN 241"}' http://127.0.0.1:8080/function/slack-interactive
{"attachments": [{"footer": "Slack Apps built on OpenFaas", "author_link": "https;//github.com/pikulkarni7/COEN241_1629
006.git", "color": "#36a64f", "text": "Head over to COEN 241", "title": "COEN 241", "ts": 123456789, "author_name": "",
 "title_link": "https://www.scu.edu/engineering/academic-programs/department-of-computer-engineering/graduate/course-de
scriptions/", "image_url": "https://www.scu.edu/media/offices/umc/scu-brand-guidelines/visual-identity-amp-photography/
visual-identity-toolkit/logos-amp-seals/Mission-Dont3.png", "response_type": "ephemeral", "replace_original": true, "fo
oter_icon": "https://a.slack-edge.com/45901/marketing/img/_rebrand/meta/slack_hash_256.png", "pretext": "Ahh yeah! Grea
t choice, COEN 241 is absolutely amazing!", "fallback": "Required plain-text summary of the attachment.", "thumb_url":
"https://www.scu.edu/engineering/academic-programs/department-of-computer-engineering/graduate/course-descriptions/", "
author_icon": "https://github.com/pikulkarni7.png"}]}
pkulkarni@ubuntuvm:~/functions$
```

Invoking slack request

```
pkulkarni@ubuntuvm:~/functions$ faas-cli invoke slack-request
Reading from STDIN - hit (Control + D) to stop.
{"text": "Serverless Message", "attachments": [{"fields": [{"short": true, "value": "100", "title": "Amazing Level"}], "author_ico
n": "", "image_url": "https://github.com/pikulkarni7.png", "author_name": "Piyush Kulkarni", "title": "The Awesome world of Cloud
Computing! COEN 241"}, {"text": "COEN 241 is the most awesome class ever!.", "title": "About COEN 241"}, {"title": "Would you reco
mmend COEN 241 to your friends?", "color": "#3AA3E3", "actions": [{"text": "Of Course!", "type": "button", "name": "recommend", "v
alue": "recommend"}, {"text": "Most Definitely!", "type": "button", "name": "definitely", "value": "definitely"}], "callback_id":
"response123", "fallback": "Would you recommend COEN 241 to your friends?", "attachment_type": "default"}]}
pkulkarni@ubuntuvm:~/functions$ curl -d '{"Hello":"COEN 241"}' http://127.0.0.1:8080/function/slack-request
{"text": "Serverless Message", "attachments": [{"fields": [{"short": true, "value": "100", "title": "Amazing Level"}], "author_ico
n": "", "image_url": "https://github.com/pikulkarni7.png", "author_name": "Piyush Kulkarni", "title": "The Awesome world of Cloud
Computing! COEN 241"}, {"text": "COEN 241 is the most awesome class ever!.", "title": "About COEN 241"}, {"title": "Would you reco
mmend COEN 241 to your friends?", "color": "#3AA3E3", "actions": [{"text": "Of Course!", "type": "button", "name": "recommend", "v
alue": "recommend"}, {"text": "Most Definitely!", "type": "button", "name": "definitely", "value": "definitely"}], "callback_id":
"response123", "fallback": "Would you recommend COEN 241 to your friends?", "attachment_type": "default"}]}
pkulkarni@ubuntuvm:~/functions$
```