

## 4 screenshots: (40 points)

Invoking figlet function:

```
zz@zz-Standard-PC-Q35-ICH9-2009:~/faasd$ echo "Hello, FaaS, world" | faas-cli invoke figlet
Hello, FaaS, world
```

Running command:

sudo journalctl -u faasd --lines 40

```
zz@zz-Standard-PC-Q35-ICH9-2009:~$ sudo journalctl -u faasd --lines 40
-- Logs begin at Fri 2022-04-29 23:11:36 CST, end at Mon 2022-05-02 21:46:19 CST. --
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 - gateway
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 - queue-worker
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: Starting: basic-auth-plugin
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 Created container: basic-auth-plugin
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 basic-auth-plugin has IP: 10.62.0.2
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 Task: basic-auth-plugin Container: basic-auth-plugin
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: Starting: nats
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: Creating local directory: /var/lib/faasd/nats
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 Running nats with user: "65534"
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 Created container: nats
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 nats has IP: 10.62.0.3
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 Task: nats Container: nats
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: Starting: prometheus
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: Creating local directory: /var/lib/faasd/prometheus
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 Running prometheus with user: "65534"
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 Created container: prometheus
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 prometheus has IP: 10.62.0.4
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 Task: prometheus Container: prometheus
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: Starting: gateway
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 Created container: gateway
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 gateway has IP: 10.62.0.5
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 Task: gateway Container: gateway
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: Starting: queue-worker
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 Created container: queue-worker
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 queue-worker has IP: 10.62.0.6
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 Task: queue-worker Container: queue-worker
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 Supervisor init done in: 39 seconds
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 Looking up IP for: "gateway"
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 Resolver rebuilding map
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 Resolver: "localhost"="127.0.0.1"
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 Resolver: "faasd-provider"="10.62.0.1"
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 Resolver: "basic-auth-plugin"="10.62.0.2"
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 Resolver: "nats"="10.62.0.3"
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 Resolver: "prometheus"="10.62.0.4"
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 Resolver: "gateway"="10.62.0.5"
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 Resolver: "queue-worker"="10.62.0.6"
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 Looking up IP for: "prometheus"
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 Proxy from: 127.0.0.1:9090, to: prometheus:9090 (10.62.0.4)
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 faasd: waiting for SIGTERM or SIGINT
五 02 15:04:10 zz-Standard-PC-Q35-ICH9-2009 faasd[8453]: 2022/05/02 15:04:10 Proxy from: 0.0.0.0:8080, to: gateway:8080 (10.62.0.5)
```

OpenFaaS gateway AFTER deploying figlet, slack-handler  
and slack-interactive functions

```
zz@zz-Standard-PC-Q35-ICH9-2009:~/functions/slack-interactive$ faas-cli version
{
  "cli": {
    "commit": "b1c09c0243f69990b6c81a17d7337f0fd23e7542",
    "version": "0.14.2"
  },
  "gateway": {
    "uri": "http://127.0.0.1:8080",
    "version": "0.21.3",
    "sha": "cdb6badddaede0f69ef8ce9cb4b7e25e876b75fa"
  },
  "provider": {
    "name": "faasd",
    "orchestration": "containerd",
    "version": "0.16.0",
    "sha": "e668beef139ee094ad7364a5534b15d84b1b1f6d"
  }
}
```

## Invoke slack-request and slack-interactive functions

```
root@z-standard-pc-q35-ic9-2009:~/functions/slack-interactive$ 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_icon": "", "image_url": "", "author_name": "goldenfish02", "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 recommend COEN 241 to your friends?", "color": "#3A4383", "actions": [{"text": "Of Course!", "type": "button", "name": "recommend", "value": "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"}]}
root@z-standard-pc-q35-ic9-2009:~/functions/slack-interactive$
root@z-standard-pc-q35-ic9-2009:~/functions/slack-interactive$ faas-cli invoke slack-interactive
Reading from STDIN - hit (Control + D) to stop.
{"a": "1"}
{"attachments": [{"footer": "Slack Apps built on OpenFaas", "author_link": "https://github.com/goldenfish02/cloud-computing", "color": "#36a64f", "text": "Head over to COEN 241", "title": "COEN 241", "ts": 123456789, "author_name": "", "title_link": "https://www.scu.edu/engineering/academic-programs/departments-of-computer-engineering/graduate/course-descriptions/", "image_url": "https://www.scu.edu/media/offices/unc/scu-brand-guidelines/visual-identity-and-photography/visual-identity-toolkit/logos-and-seals/Mission-Dont3.png", "response_type": "ephemeral", "replace_original": true, "footer_icon": "https://a.slack-edge.com/45981/marketing/img/_rebrand/meta/slack_hash_256.png", "pretext": "Ahh yeah! Great choice, COEN 241 is absolutely amazing!", "fallback": "Required plain-text summary of the attachment.", "thumb_url": "https://www.scu.edu/engineering/academic-programs/departments-of-computer-engineering/graduate/course-descriptions/", "author_icon": ""}]}
root@z-standard-pc-q35-ic9-2009:~/functions/slack-interactive$
```