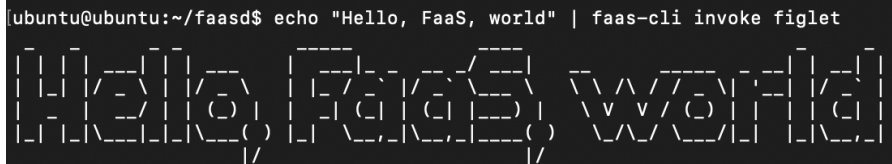


## COEN 241: HW - 2

### 1. Screenshot of invoking the figlet function

```
ubuntu@ubuntu:~/faasd$ echo "Hello, FaaS, world" | faas-cli invoke figlet
```



Faas-cli store deploy figlet command is run to deploy figlet function.

This gives us the output:

Deployed. 200 OK.

URL: <http://127.0.0.1:8080/function/figlet>

Faas-cli store inspect figlet command gives us the output:

Info for: Figlet

Name figlet

Description Generate ASCII logos with the figlet CLI

Image ghcr.io/openfaas/figlet:latest

Process figlet

Repo URL <https://github.com/openfaas/store-functions>

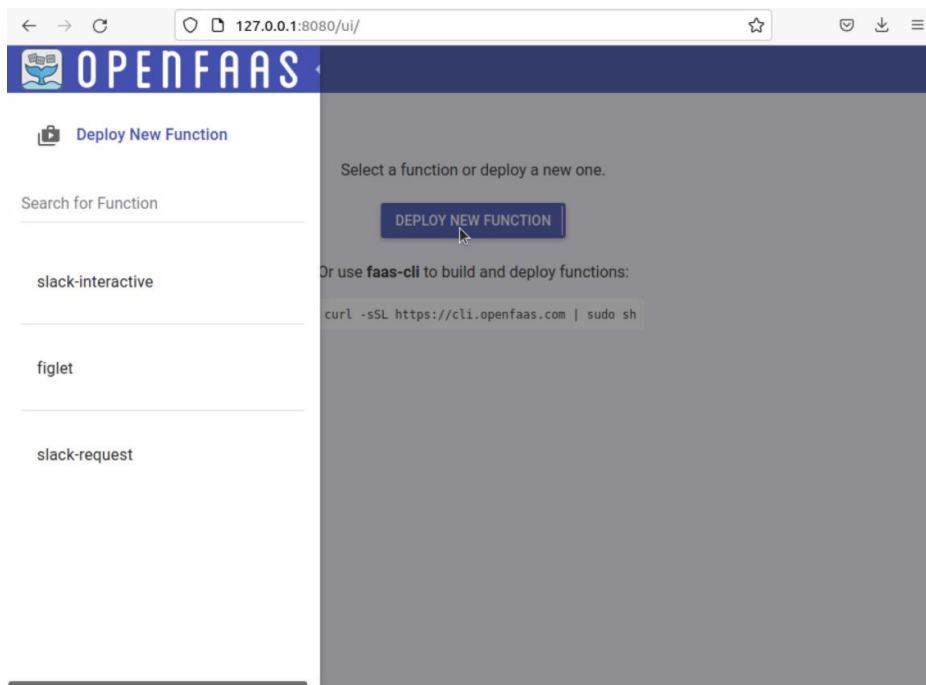
Then figlet invoke is run using echo to print string as above.

### 2. sudo journalctl -u faasd --lines 40

This command is used to print logs for checking if faasd runs successfully.

```
ubuntu@ubuntu:~/functions$ sudo journalctl -u faasd --lines 40
-- Logs begin at Mon 2023-02-13 08:32:46 UTC, end at Mon 2023-02-13 08:54:19 UT>
Feb 13 08:34:40 ubuntu faasd[2591]: 2023/02/13 08:34:40 - gateway
Feb 13 08:34:40 ubuntu faasd[2591]: 2023/02/13 08:34:40 - queue-worker
Feb 13 08:34:40 ubuntu faasd[2591]: Starting: nats
Feb 13 08:34:40 ubuntu faasd[2591]: Creating local directory: /var/lib/faasd/na>
Feb 13 08:34:40 ubuntu faasd[2591]: 2023/02/13 08:34:40 Running nats with user:>
Feb 13 08:34:40 ubuntu faasd[2591]: 2023/02/13 08:34:40 Created container: nats
Feb 13 08:34:40 ubuntu faasd[2591]: 2023/02/13 08:34:40 nats has IP: 10.62.0.2
Feb 13 08:34:40 ubuntu faasd[2591]: 2023/02/13 08:34:40 Task: nats Conta>
Feb 13 08:34:40 ubuntu faasd[2591]: Starting: prometheus
Feb 13 08:34:40 ubuntu faasd[2591]: Creating local directory: /var/lib/faasd/pr>
Feb 13 08:34:40 ubuntu faasd[2591]: 2023/02/13 08:34:40 Running prometheus with>
Feb 13 08:34:40 ubuntu faasd[2591]: 2023/02/13 08:34:40 Created container: prom>
Feb 13 08:34:40 ubuntu faasd[2591]: 2023/02/13 08:34:40 prometheus has IP: 10.6>
Feb 13 08:34:40 ubuntu faasd[2591]: 2023/02/13 08:34:40 Task: prometheus >
Feb 13 08:34:40 ubuntu faasd[2591]: Starting: basic-auth-plugin
Feb 13 08:34:40 ubuntu faasd[2591]: 2023/02/13 08:34:40 Created container: basi>
Feb 13 08:34:41 ubuntu faasd[2591]: 2023/02/13 08:34:41 basic-auth-plugin has I>
Feb 13 08:34:41 ubuntu faasd[2591]: 2023/02/13 08:34:41 Task: basic-auth-plugin>
Feb 13 08:34:41 ubuntu faasd[2591]: Starting: gateway
Feb 13 08:34:41 ubuntu faasd[2591]: 2023/02/13 08:34:41 Created container: gate>
Feb 13 08:34:41 ubuntu faasd[2591]: 2023/02/13 08:34:41 gateway has IP: 10.62.0>
Feb 13 08:34:41 ubuntu faasd[2591]: 2023/02/13 08:34:41 Task: gateway Co>
Feb 13 08:34:41 ubuntu faasd[2591]: Starting: queue-worker
Feb 13 08:34:41 ubuntu faasd[2591]: 2023/02/13 08:34:41 Created container: queu>
Feb 13 08:34:41 ubuntu faasd[2591]: 2023/02/13 08:34:41 queue-worker has IP: 10>
Feb 13 08:34:41 ubuntu faasd[2591]: 2023/02/13 08:34:41 Task: queue-worker >
Feb 13 08:34:41 ubuntu faasd[2591]: 2023/02/13 08:34:41 Supervisor init done in>
Feb 13 08:34:41 ubuntu faasd[2591]: 2023/02/13 08:34:41 Looking up IP for: "gat>
Feb 13 08:34:41 ubuntu faasd[2591]: 2023/02/13 08:34:41 Resolver rebuilding map>
Feb 13 08:34:41 ubuntu faasd[2591]: 2023/02/13 08:34:41 Resolver: "localhost"=>
Feb 13 08:34:41 ubuntu faasd[2591]: 2023/02/13 08:34:41 Resolver: "faasd-provid>
Feb 13 08:34:41 ubuntu faasd[2591]: 2023/02/13 08:34:41 Resolver: "nats"="10.62>
Feb 13 08:34:41 ubuntu faasd[2591]: 2023/02/13 08:34:41 Resolver: "prometheus">
Feb 13 08:34:41 ubuntu faasd[2591]: 2023/02/13 08:34:41 Resolver: "basic-auth-p>
Feb 13 08:34:41 ubuntu faasd[2591]: 2023/02/13 08:34:41 Resolver: "gateway"="10>
Feb 13 08:34:41 ubuntu faasd[2591]: 2023/02/13 08:34:41 Resolver: "queue-work>
Feb 13 08:34:41 ubuntu faasd[2591]: 2023/02/13 08:34:41 Looking up IP for: "pro>
Feb 13 08:34:41 ubuntu faasd[2591]: 2023/02/13 08:34:41 Proxy from: 127.0.0.1:>
Feb 13 08:34:41 ubuntu faasd[2591]: 2023/02/13 08:34:41 faasd: waiting for SIGT>
Feb 13 08:34:41 ubuntu faasd[2591]: 2023/02/13 08:34:41 Proxy from: 0.0.0.0:808>
```

3. Screenshot of your OpenFaaS gateway AFTER deploying figlet, slack-handler and slack-interactive functions



This output includes figlet, slack-interactive and slack-request which confirms that they are deployed.

4. Screenshot of invoking slack-request and slack-interactive functions
  - a. `$faas-cli invoke slack-request`

```
ubuntu@ubuntu:~/functions$ echo "Running" | sudo faas-cli invoke slack-request
{"text": "Serverless Message", "attachments": [{"fields": [{"short": true, "value": "100", "title": "Amazing Level"}], "author_icon": "", "image_url": "https://github.com/benitarego.png", "author_name": "Benita Rego", "title": "The Awesome world of Cloud Computing! COEN 241", {"text": "COEN 241 is my favourite class and I enjoy it!", "title": "About COEN 241", {"title": "Would you recommend COEN 241 to your friends?", "color": "#3AA3E3", "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"}]}
```

- b. `$curl -d '{"Hello": "COEN 241"}' http://127.1.0.1:8080/function/slack-request`

```
buntu@ubuntu:~/functions$ curl -d '{"Hello": "COEN 241"}' http://127.1.0.1:8080/function/slack-request
{"text": "Serverless Message", "attachments": [{"fields": [{"short": true, "value": "100", "title": "Amazing Level"}], "author_icon": "", "image_url": "https://github.com/benitarego.png", "author_name": "Benita Rego", "title": "The Awesome world of Cloud Computing! COEN 241", {"text": "COEN 241 is my favourite class and I enjoy it!", "title": "About COEN 241", {"title": "Would you recommend COEN 241 to your friends?", "color": "#3AA3E3", "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"}]}
```

- c. `$faas-cli invoke slack-interactive`

```
ubuntu@ubuntu:~/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/benitarego/COEN-241-CC.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/departments-of-computer-engineering/graduate/course-descriptions/", "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, "footer_icon": "https://a.slack-edge.com/45901/marketing/img/_rebrand/meta/slack_hash_256.png", "pretext": "Yes! That's an amazing choice, COEN 241 is 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": "https://github.com/benitarego.png"}]}
```

d. `$curl -d '{"Hello": "COEN 241"}' http://127.0.0.1:8080/function/slack-interactive`

```
8080/function/slack-interactive curl -d '{"Hello": "COEN 241"}' http://127.0.0.1:
{"attachments": [{"footer": "Slack Apps built on OpenFaas", "author_link": "https://github.com/benitarego/COEN-241-CC.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-descriptions/", "image_url": "https://www.scu.edu/media/offices/umc/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/45901/marketing/img/_rebrand/meta/slack_hash_256.png", "pretext": "Yes! That's an amazing choice, COEN 241 is 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/benitarego.png"}]}
```

Here, we use both curl and the faas-cli to call the slack-request and slack-interactive methods to obtain the results seen above.