

COEN 241 assignment 2 explanation:

1. Invoking the figlet function:

```
stutijani@stutijani-GP63-Leopard-8RF:~/faasd$ faas-cli store inspect figlet
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

stutijani@stutijani-GP63-Leopard-8RF:~/faasd$ echo "Hello, Faas, world" | faas-cli invoke figlet
Hello, Faas, world
stutijani@stutijani-GP63-Leopard-8RF:~/faasd$
```

I deployed a function called figlet from the OpenFaas store. We are going to execute the command `faas-cli store deploy figlet`.

We are supposed to find the url for the function using `faas-cli store inspect flight`

After that we invoke figlet and print some ASCII characters.

Echo "Hello, Faas world"| `faas-cli invoke figlet`

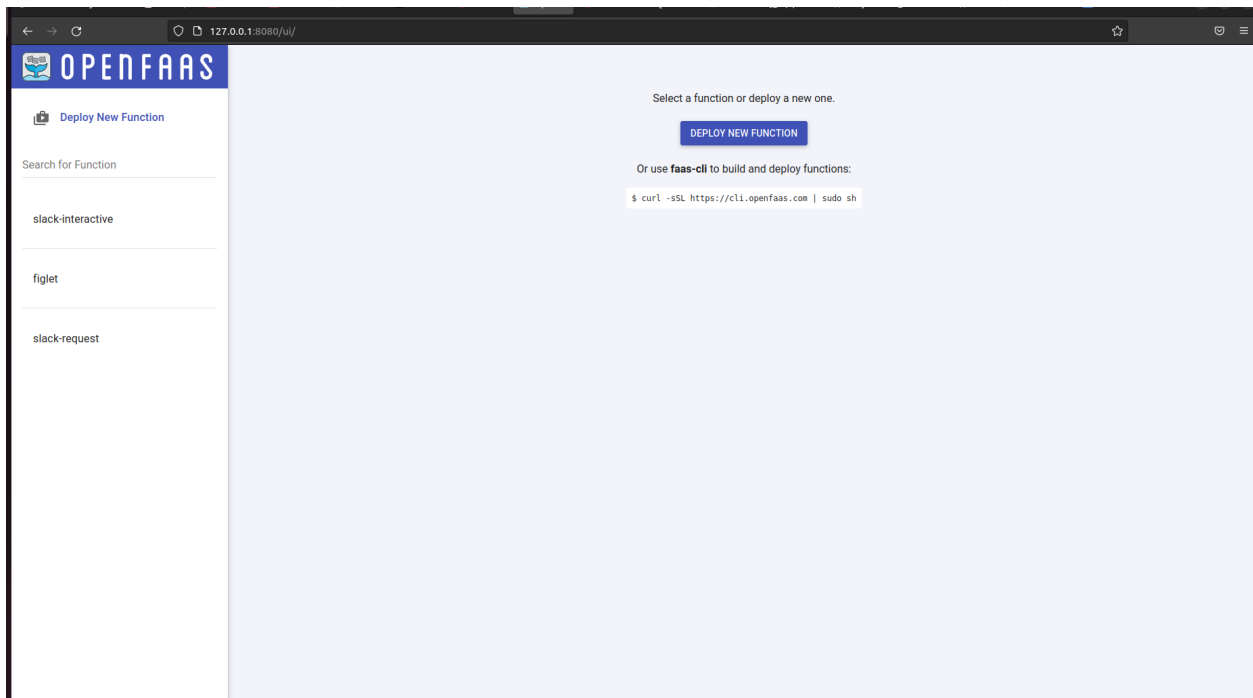
PTO

2. Running `sudo journalctl -u faasd -lines 40` command:

```
stutijani@stutijani-GP63-Leopard-8RF:~/functions$ sudo journalctl -u faasd --lines 40
Nov 02 11:24:16 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:16 - gateway
Nov 02 11:24:16 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:16 - queue-worker
Nov 02 11:24:16 stutijani-GP63-Leopard-8RF faasd[8681]: Starting: nats
Nov 02 11:24:16 stutijani-GP63-Leopard-8RF faasd[8681]: Creating local directory: /var/lib/faasd/nats
Nov 02 11:24:16 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:16 Running nats with user: v
Nov 02 11:24:16 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:16 Created container: nats
Nov 02 11:24:17 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:17 nats has IP: 10.62.0.2
Nov 02 11:24:17 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:17 Task: nats Containv
Nov 02 11:24:17 stutijani-GP63-Leopard-8RF faasd[8681]: Starting: prometheus
Nov 02 11:24:17 stutijani-GP63-Leopard-8RF faasd[8681]: Creating local directory: /var/lib/faasd/prometheus
Nov 02 11:24:17 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:17 Running prometheus with v
Nov 02 11:24:17 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:17 Created container: prome
Nov 02 11:24:17 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:17 prometheus has IP: 10.62v
Nov 02 11:24:17 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:17 Task: prometheus v
Nov 02 11:24:17 stutijani-GP63-Leopard-8RF faasd[8681]: Starting: basic-auth-plugin
Nov 02 11:24:19 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:19 Created container: basic
Nov 02 11:24:19 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:19 basic-auth-plugin has IP: v
Nov 02 11:24:19 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:19 Task: basic-auth-plugin v
Nov 02 11:24:19 stutijani-GP63-Leopard-8RF faasd[8681]: Starting: gateway
Nov 02 11:24:20 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:20 Created container: gatew
Nov 02 11:24:21 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:21 gateway has IP: 10.62.0.5
Nov 02 11:24:21 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:21 Task: gateway Con
Nov 02 11:24:22 stutijani-GP63-Leopard-8RF faasd[8681]: Starting: queue-worker
Nov 02 11:24:24 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:24 Created container: queue
Nov 02 11:24:24 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:24 queue-worker has IP: 10.
Nov 02 11:24:24 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:24 Task: queue-worker
Nov 02 11:24:24 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:24 Supervisor init done in:
Nov 02 11:24:24 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:24 Looking up IP for: "prom
Nov 02 11:24:24 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:24 Resolver rebuilding map
Nov 02 11:24:24 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:24 Looking up IP for: "gate
Nov 02 11:24:24 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:24 Resolver: "localhost"="1
Nov 02 11:24:24 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:24 Resolver: "faasd-provide
Nov 02 11:24:24 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:24 Resolver: "nats"="10.62.
Nov 02 11:24:24 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:24 Resolver: "prometheus"=
Nov 02 11:24:24 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:24 Resolver: "basic-auth-pl
Nov 02 11:24:24 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:24 Resolver: "gateway"="10.
Nov 02 11:24:24 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:24 Resolver: "queue-worker"
Nov 02 11:24:24 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:24 faasd: waiting for SIGTE
Nov 02 11:24:24 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:24 Proxy from: 0.0.0.0:8080
Nov 02 11:24:24 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:24 Proxy from: 127.0.0.1:90
[lines 1-40/40 (END)]... skipping...
Nov 02 11:24:16 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:16 - gateway
Nov 02 11:24:16 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:16 - queue-worker
Nov 02 11:24:16 stutijani-GP63-Leopard-8RF faasd[8681]: Starting: nats
Nov 02 11:24:16 stutijani-GP63-Leopard-8RF faasd[8681]: Creating local directory: /var/lib/faasd/nats
Nov 02 11:24:16 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:16 Running nats with user: "65534"
Nov 02 11:24:16 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:16 Created container: nats
Nov 02 11:24:17 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:17 nats has IP: 10.62.0.2
Nov 02 11:24:17 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:17 Task: nats Container: nats
Nov 02 11:24:17 stutijani-GP63-Leopard-8RF faasd[8681]: Starting: prometheus
Nov 02 11:24:17 stutijani-GP63-Leopard-8RF faasd[8681]: Creating local directory: /var/lib/faasd/prometheus
Nov 02 11:24:17 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:17 Running prometheus with user: "65534"
Nov 02 11:24:17 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:17 Created container: prometheus
Nov 02 11:24:17 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:17 prometheus has IP: 10.62.0.3
Nov 02 11:24:17 stutijani-GP63-Leopard-8RF faasd[8681]: 2022/11/02 11:24:17 Task: prometheus Container: pro
```

The above command is used to print logs to check whether Faasd is running or not. We are printing 40 lines of the log.

3. OpenFaas Gateway screenshot AFTER deploying Figlet, slack - handler and slack-interactive functions:



This screenshot shows that all the functions are deployed in the cluster.

4. Invoking slack-request function via curl and faas-cli

```
stutijani@stutijani-GP63-Leopard-8RF:~/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_icon": "", "image_url": "https://github.com/stutijani12.png", "author_name": "Stuti Jani", "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 y our friends?", "color": "#3AA3E3", "actions": [{"text": "Of Course!", "type": "button", "name": "reco mmend", "value": "recommend"}, {"text": "Most Definitely!", "type": "button", "name": "definitely", " value": "definitely"}], "callback_id": "response123", "fallback": "Would you recommend COEN 241 to yo ur friends?", "attachment_type": "default"}]}
stutijani@stutijani-GP63-Leopard-8RF:~/functions$ ^C
stutijani@stutijani-GP63-Leopard-8RF:~/functions$ faas-cli invoke slack-interactive
Reading from STDIN - hit (Control + D) to stop.
{"text": "Serverless Message", "attachments": [{"fields": [{"short": true, "value": "100", "title": "Amazing Level"}], "author_icon": "", "image_url": "https://github.com/stutijani12.png", "author_name": "Stuti Jani", "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 y our friends?", "color": "#3AA3E3", "actions": [{"text": "Of Course!", "type": "button", "name": "reco mmend", "value": "recommend"}, {"text": "Most Definitely!", "type": "button", "name": "definitely", " value": "definitely"}], "callback_id": "response123", "fallback": "Would you recommend COEN 241 to yo ur friends?", "attachment_type": "default"}]}
stutijani@stutijani-GP63-Leopard-8RF:~/functions$
```

```
value": "definitely"}], "callback_id": "response123", "fallback": "Would you recommend COEN 241 to yo ur friends?", "attachment_type": "default"}]}
stutijani@stutijani-GP63-Leopard-8RF:~/functions$ curl -d '{"Hello":"COEN 241"}' http://127.0.0.1:808 0/function/slack-request
{"text": "Serverless Message", "attachments": [{"fields": [{"short": true, "value": "100", "title": "Amazing Level"}], "author_icon": "", "image_url": "https://github.com/stutijani12.png", "author_name": "Stuti Jani", "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 y our friends?", "color": "#3AA3E3", "actions": [{"text": "Of Course!", "type": "button", "name": "reco mmend", "value": "recommend"}, {"text": "Most Definitely!", "type": "button", "name": "definitely", " value": "definitely"}], "callback_id": "response123", "fallback": "Would you recommend COEN 241 to yo ur friends?", "attachment_type": "default"}]}
stutijani@stutijani-GP63-Leopard-8RF:~/functions$
```

5. Invoking slack-interactive function via curl and faas-cli

```
stutijani@stutijani-GP63-Leopard-8RF:~/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_icon": "", "image_url": "https://github.com/stutijani12.png", "author_name": "Stuti Jani", "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 y our friends?", "color": "#3AA3E3", "actions": [{"text": "Of Course!", "type": "button", "name": "reco mmend", "value": "recommend"}, {"text": "Most Definitely!", "type": "button", "name": "definitely", " value": "definitely"}], "callback_id": "response123", "fallback": "Would you recommend COEN 241 to yo ur friends?", "attachment_type": "default"}]}
stutijani@stutijani-GP63-Leopard-8RF:~/functions$ ^C
stutijani@stutijani-GP63-Leopard-8RF:~/functions$ faas-cli invoke slack-interactive
Reading from STDIN - hit (Control + D) to stop.
{"text": "Serverless Message", "attachments": [{"fields": [{"short": true, "value": "100", "title": "Amazing Level"}], "author_icon": "", "image_url": "https://github.com/stutijani12.png", "author_name": "Stuti Jani", "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 y our friends?", "color": "#3AA3E3", "actions": [{"text": "Of Course!", "type": "button", "name": "reco mmend", "value": "recommend"}, {"text": "Most Definitely!", "type": "button", "name": "definitely", " value": "definitely"}], "callback_id": "response123", "fallback": "Would you recommend COEN 241 to yo ur friends?", "attachment_type": "default"}]}
stutijani@stutijani-GP63-Leopard-8RF:~/functions$
```

```
ur friends?", "attachment_type": "default"]}]}
```

```
stutijani@stutijani-GP63-Leopard-8RF:~/functions$ curl -d '{"Hello":"COEN 241"}' http://127.0.0.1:8080/function/slack-interactive
```

```
{
  "text": "Serverless Message",
  "attachments": [
    {
      "fields": [
        {
          "short": true,
          "value": "100",
          "title": "Amazing Level"
        }
      ],
      "author_icon": "",
      "image_url": "https://github.com/stutijani12.png",
      "author_name": "Stuti Jani",
      "title": "The Awesome world of Cloud Computing! COEN 241",
      "text": "COEN 241 is the most awesome class ever!.",
      "title": "About COEN 241",
      "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"
    }
  ]
}
```

```
stutijani@stutijani-GP63-Leopard-8RF:~/functions$
```