

## Homework - 2

## 1. Invoking figlet function

```
[meghshanth@fedora faasd]$ sudo faas-cli store deploy figlet
```

Function figlet already exists, attempting rolling-update.

Deployed. 200 OK.  
URL: http://127.0.0.1:8080/function/figlet

```
[meghshanth@fedora faasd]$  
[meghshanth@fedora faasd]$ sudo 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

```
[meghshanth@fedora faasd]$ echo "Hello, FaaS, world" | sudo faas-cli invoke figlet
```

```
[meghshanth@fedora faasd]$
```

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

```
[meghshanth@fedora faasd]$ sudo journalctl -u faasd --lines 40
Nov 07 19:14:44 fedora faasd[874]: 2022/11/07 19:14:44 - gateway
Nov 07 19:14:44 fedora faasd[874]: 2022/11/07 19:14:44 - queue-worker
Nov 07 19:14:44 fedora faasd[874]: Starting: nats
Nov 07 19:14:44 fedora faasd[874]: Creating local directory: /var/lib/faasd/nats
Nov 07 19:14:44 fedora faasd[874]: 2022/11/07 19:14:44 Running nats with user: "65534"
Nov 07 19:14:44 fedora faasd[874]: 2022/11/07 19:14:44 Created container: nats
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 nats has IP: 10.62.0.2
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 Task: nats Container: nats
Nov 07 19:14:45 fedora faasd[874]: Starting: prometheus
Nov 07 19:14:45 fedora faasd[874]: Creating local directory: /var/lib/faasd/prometheus
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 Running prometheus with user: "65534"
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 Created container: prometheus
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 prometheus has IP: 10.62.0.3
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 Task: prometheus Container: prometheus
Nov 07 19:14:45 fedora faasd[874]: Starting: basic-auth-plugin
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 Created container: basic-auth-plugin
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 basic-auth-plugin has IP: 10.62.0.4
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 Task: basic-auth-plugin Container: basic-auth-plugin
Nov 07 19:14:45 fedora faasd[874]: Starting: gateway
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 Created container: gateway
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 gateway has IP: 10.62.0.5
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 Task: gateway Container: gateway
Nov 07 19:14:45 fedora faasd[874]: Starting: queue-worker
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 Created container: queue-worker
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 queue-worker has IP: 10.62.0.6
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 Task: queue-worker Container: queue-worker
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 Supervisor init done in: 1 second
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 Looking up IP for: "prometheus"
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 Looking up IP for: "gateway"
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 Resolver rebuilding map
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 faasd: waiting for SIGTERM or SIGINT
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 Resolver: "localhost"="127.0.0.1"
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 Resolver: "faasd-provider"="10.62.0.1"
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 Resolver: "nats"="10.62.0.2"
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 Resolver: "prometheus"="10.62.0.3"
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 Resolver: "basic-auth-plugin"="10.62.0.4"
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 Resolver: "gateway"="10.62.0.5"
Nov 07 19:14:45 fedora faasd[874]: 2022/11/07 19:14:45 Resolver: "queue-worker"="10.62.0.6"
Nov 07 19:14:46 fedora faasd[874]: 2022/11/07 19:14:46 Proxy from: 0.0.0.0:8080, to: gateway:8080 (10.62.0.5)
Nov 07 19:14:46 fedora faasd[874]: 2022/11/07 19:14:46 Proxy from: 127.0.0.1:9090, to: prometheus:9090 (10.62.0.3)
[meghshanth@fedora faasd]$
```

### 3. OpenFaas gateway after deploying figlet function

The screenshot shows the OpenFaaS Portal interface. On the left sidebar, the 'figlet' function is selected. The main panel displays the function's details and an 'Invoke function' section.

Status	Replicas	Invocation count
Ready	1	1

Image: ghcr.io/openfaas/figlet:latest  
Function process: figlet  
URL: http://localhost:8080/function/figlet

**Invoke function**

☒ Text ☐ JSON ☐ Download

Request body

Response status: 200  
Round trip (s): 0.016

Response body

### 4. OpenFaas gateway after deploying slack-request function

The screenshot shows the OpenFaaS Portal interface. On the left sidebar, the 'slack-request' function is selected. The main panel displays the function's details and an 'Invoke function' section.

Status	Replicas	Invocation count
Ready	1	7

Image: docker.io/meghshanth/slack-request:latest  
Function process: python index.py  
URL: http://localhost:8080/function/slack-request

**Invoke function**

☐ Text ☒ JSON ☐ Download

Request body

Response status: 200  
Round trip (s): 0.046

Response body

```
{
  "text": "Serverless Message",
  "attachments": [
    {
      "fields": [
        {
          "short": true,
          "value": "100",
          "title": "Amazing Level"
        }
      ]
    }
  ]
}
```

## 5. OpenFaaS gateway after deploying slack-interactive function

The screenshot shows the OpenFaaS Portal interface. On the left, there's a sidebar with 'Deploy New Function' and a search bar. The main area displays the 'slack-interactive' function details, including its status (Ready), replicas (1), and invocation count (91). Below this, there's an 'Invoke function' section with a 'JSON' radio button selected. The request body is shown as `{\"key\": \"anyurl\"}`. The response status is 200, and the response body is a JSON object with an 'attachments' array containing a single attachment with a footer, author link, color, text, title, and timestamp.

## 6. Invoking slack-interactive via curl and via faas-cli

```
meghshanth@fedora:~/functions
[meghshanth@fedora functions]$ curl -d '{"Hello":"Cloud"}' http://127.0.0.1:8080/function/slack-interactive
{"attachments": [{"footer": "Slack Apps built on OpenFaas", "author_link": "https://github.com/Meghshanth/cloud_assignments", "color": "#36a64f", "text": "Head over to COEN 241", "title": "COEN 241", "ts": 123456789, "author_name": "Meghs\nhanth", "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-photo\ngraphy/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": "Ahh yea\nhi 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-descriptio\nns/", "author_icon": "https://avatars.githubusercontent.com/u/114982022?s=64&v=4"}]]}
[meghshanth@fedora functions]$ sudo faas-cli invoke slack-interactive
Reading from STDIN - hit (Control + D) to stop.
{"Hello":"Cloud"}
{"attachments": [{"footer": "Slack Apps built on OpenFaas", "author_link": "https://github.com/Meghshanth/cloud_assignments", "color": "#36a64f", "text": "Head over to COEN 241", "title": "COEN 241", "ts": 123456789, "author_name": "Meghs\nhanth", "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-photo\ngraphy/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": "Ahh yea\nhi 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-descriptio\nns/", "author_icon": "https://avatars.githubusercontent.com/u/114982022?s=64&v=4"}]]}
[meghshanth@fedora functions]$
```

## 7. Invoking slack-request via curl and via faas-cli

```
meghshanth@fedora:~/functions
[meghshanth@fedora functions]$ curl -d '{"Hello":"Cloud"}' http://127.0.0.1:8080/function/slack-request
{"text": "Serverless Message", "attachments": [{"fields": [{"short": true, "value": "100%", "title": "Amazing Level!"}], "author_icon": "", "image_url": "https://avatars.githubusercontent.com/u/114982022?s=64&v=4", "author_name": "Meghshant\nh", "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": "#3A43E3", "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 recomme\nnd COEN 241 to your friends?", "attachment_type": "default"}]]}
[meghshanth@fedora functions]$ sudo 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://avatars.githubusercontent.com/u/114982022?s=64&v=4", "author_name": "Meghshant\nh", "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": "#3A43E3", "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 recomme\nnd COEN 241 to your friends?", "attachment_type": "default"}]]}
[meghshanth@fedora functions]$
```