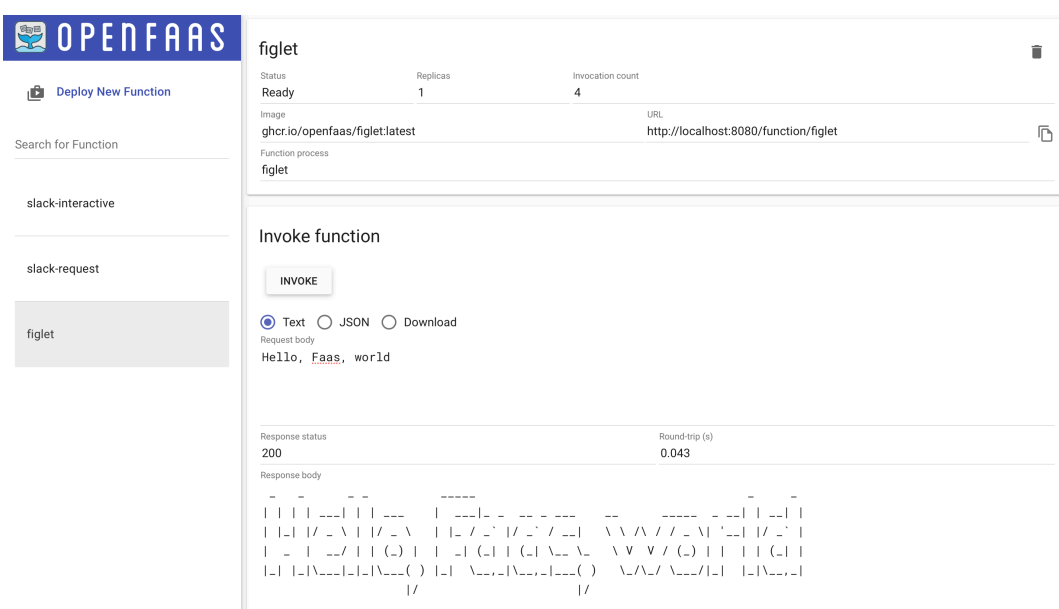
Cloud Computing HW 2 Screenshots

Screenshot of invoking Figlet Function:

When I give the following command, the Figlet function gets invoked :
echo “Hello, Faas, world” | faas-cli invoke figlet
Here the output is the text in ASCII form

Invoking using OpenFaas gateway:



slack-request/handler.py:

```python
import json
def handle(req):
    data = {
        "text": "Serverless Message",
        "attachments": [{
            "title": "The Awesome world of Cloud Computing! COEN 241",
            "fields": [{
                "title": "Amazing Level",
                "value": "100",
                "short": True
            }],
            "author_name": "Arthi",
            "author_icon": "",
            "image_url": "https://avatars.githubusercontent.com/u/81531516?s=400&u=de6c8ba999f3bb816b70cef6cb43df70e155efc3&v=4"
        },
        {
            "title": "About COEN 241",
            "text": "COEN 241 is the most awesome class ever!."
        },
        {
            "fallback": "Would you recommend COEN 241 to your friends?",
            "title": "Would you recommend COEN 241 to your friends?",
            "callback_id": "response123",
            "color": "#3AA3E3",
            "attachment_type": "default",
            "actions": [
                {
                    "name": "recommend",
                    "text": "Of Course!",
                    "type": "button",
                    "value": "recommend"
                },
                {
                    "name": "definitely",
                    "text": "Most Definitely!",
                    "type": "button",
                    "value": "definitely"
                }
            ]
        }]
    }
    return json.dumps(data)
```

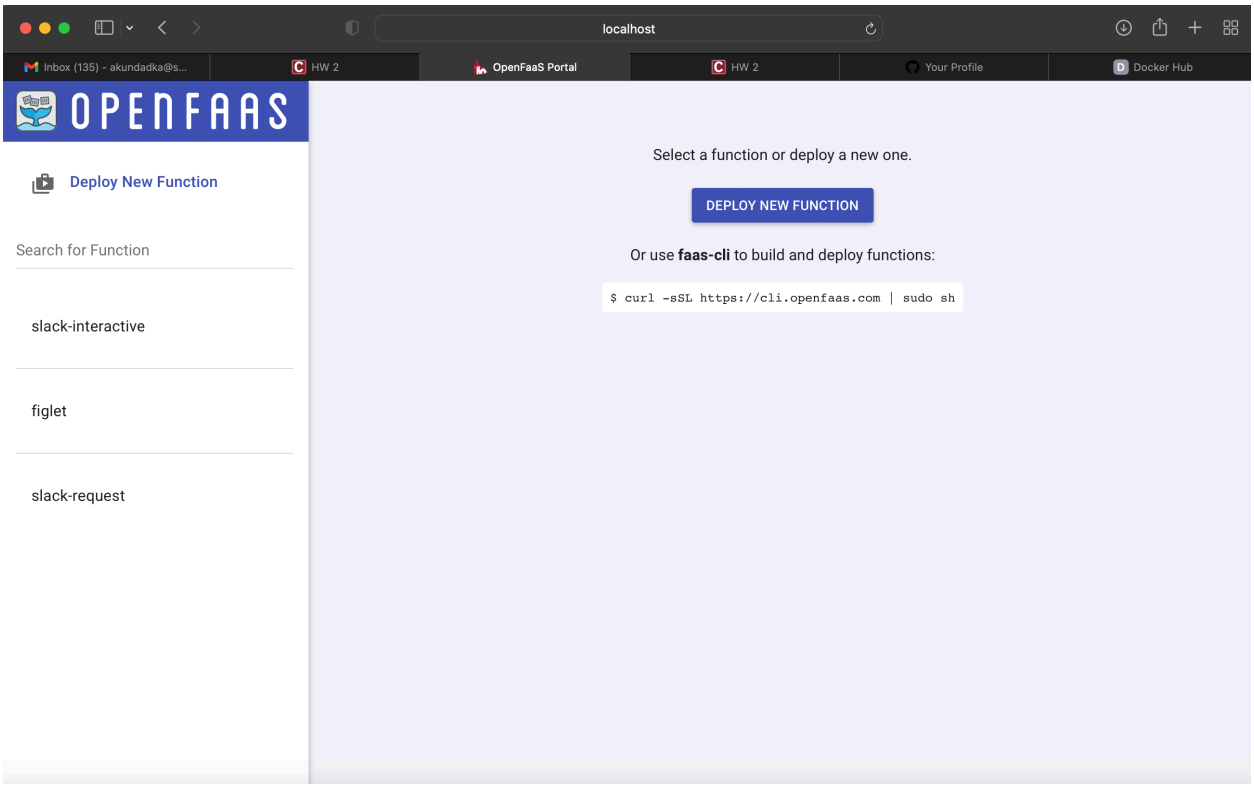
slack-interactive/handler.py:

```python
import json
import urllib
def handle(req):
    urlstring = urllib.unquote(req).decode('utf8').strip('payload=')
    response = json.loads(urlstring)
    data = {
        "attachments": [
            {
                "replace_original": True,
                "response_type": "ephemeral",
                "fallback": "Required plain-text summary of the attachment.",
                "color": "#36a64f",
                "pretext": "Ahh yeah! Great choice, COEN 241 is absolutely amazing!",
                "author_name": "Arthi",
                "author_link": "https://github.com/Arthi-K",
                "author_icon": "https://avatars.githubusercontent.com/u/81531516?s=400&u=de6c8ba999f3bb816b70cef6cb43df70e155efc3&v=4",
                "title": "COEN 241",
                "title_link": "https://www.scu.edu/engineering/academic-programs/department-of-computer-engineering/graduate/course-descriptions/",
                "text": "Head over to COEN 241",
                "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",
                "thumb_url": "https://www.scu.edu/engineering/academic-programs/department-of-computer-engineering/graduate/course-descriptions/",
                "footer": "Slack Apps built on OpenFaas",
                "footer_icon": "https://a.slack-edge.com/45901/marketing/img/_rebrand/meta/slack_hash_256.png",
                "ts": 123456789
            }
      ]
    }
    return json.dumps(data)
```

Screenshot of running the command sudo journalctl -u faasd —lines 40:

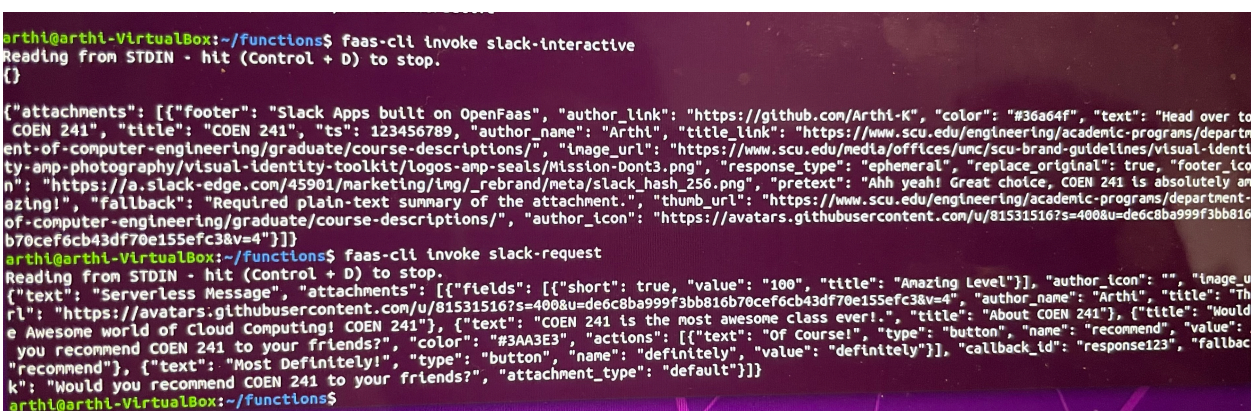
```
arthi@arthi-VirtualBox: ~/Desktop/faasd
-- Logs begin at Mon 2021-11-08 21:19:06 PST, end at Wed 2021-11-10 14:23:53 PST. --
Nov 10 07:25:06 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:06 Start-up order:
Nov 10 07:25:06 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:06 - nats
Nov 10 07:25:06 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:06 - queue-worker
Nov 10 07:25:06 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:06 - basic-auth-plugin
Nov 10 07:25:06 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:06 - prometheus
Nov 10 07:25:06 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:06 - gateway
Nov 10 07:25:06 arthi-VirtualBox faasd[3580]: Starting: nats
Nov 10 07:25:07 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:07 Created container: nats
Nov 10 07:25:07 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:07 nats has IP: 10.62.0.2
Nov 10 07:25:07 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:07 Task: nats        Container: nats
Nov 10 07:25:07 arthi-VirtualBox faasd[3580]: Starting: queue-worker
Nov 10 07:25:07 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:07 Created container: queue-worker
Nov 10 07:25:07 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:07 queue-worker has IP: 10.62.0.3
Nov 10 07:25:07 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:07 Task: queue-worker        Container: queue-worker
Nov 10 07:25:07 arthi-VirtualBox faasd[3580]: Starting: basic-auth-plugin
Nov 10 07:25:07 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:07 Created container: basic-auth-plugin
Nov 10 07:25:08 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:08 basic-auth-plugin has IP: 10.62.0.4
Nov 10 07:25:08 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:08 Task: basic-auth-plugin        Container: basic-auth-plugin
Nov 10 07:25:08 arthi-VirtualBox faasd[3580]: Starting: prometheus
Nov 10 07:25:08 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:08 Created container: prometheus
Nov 10 07:25:08 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:08 prometheus has IP: 10.62.0.5
Nov 10 07:25:08 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:08 Task: prometheus        Container: prometheus
Nov 10 07:25:08 arthi-VirtualBox faasd[3580]: Starting: gateway
Nov 10 07:25:08 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:08 Created container: gateway
Nov 10 07:25:08 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:08 gateway has IP: 10.62.0.6
Nov 10 07:25:08 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:08 Task: gateway        Container: gateway
Nov 10 07:25:08 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:08 Supervisor init done in: 14.859278492s
Nov 10 07:25:08 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:08 Looking up IP for: "prometheus"
Nov 10 07:25:08 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:08 Resolver rebuilding map
Nov 10 07:25:08 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:08 Resolver: "localhost"="127.0.0.1"
Nov 10 07:25:08 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:08 Resolver: "faasd-provider"="10.62.0.1"
Nov 10 07:25:08 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:08 Resolver: "nats"="10.62.0.2"
Nov 10 07:25:08 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:08 Resolver: "queue-worker"="10.62.0.3"
Nov 10 07:25:08 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:08 Resolver: "basic-auth-plugin"="10.62.0.4"
Nov 10 07:25:08 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:08 Resolver: "prometheus"="10.62.0.5"
Nov 10 07:25:08 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:08 Resolver: "gateway"="10.62.0.6"
Nov 10 07:25:08 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:08 Looking up IP for: "gateway"
Nov 10 07:25:08 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:08 Proxy from: 0.0.0.0:8080, to: gateway:8080 (10.62.0.6)
Nov 10 07:25:08 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:08 faasd: waiting for SIGTERM or SIGINT
Nov 10 07:25:08 arthi-VirtualBox faasd[3580]: 2021/11/10 07:25:08 Proxy from: 127.0.0.1:9090, to: prometheus:9090 (10.62.0.5)
lines 1-41
```

Screenshot of your OpenFaaS gateway after deploying figlet, slack-handler and slack-interactive functions:

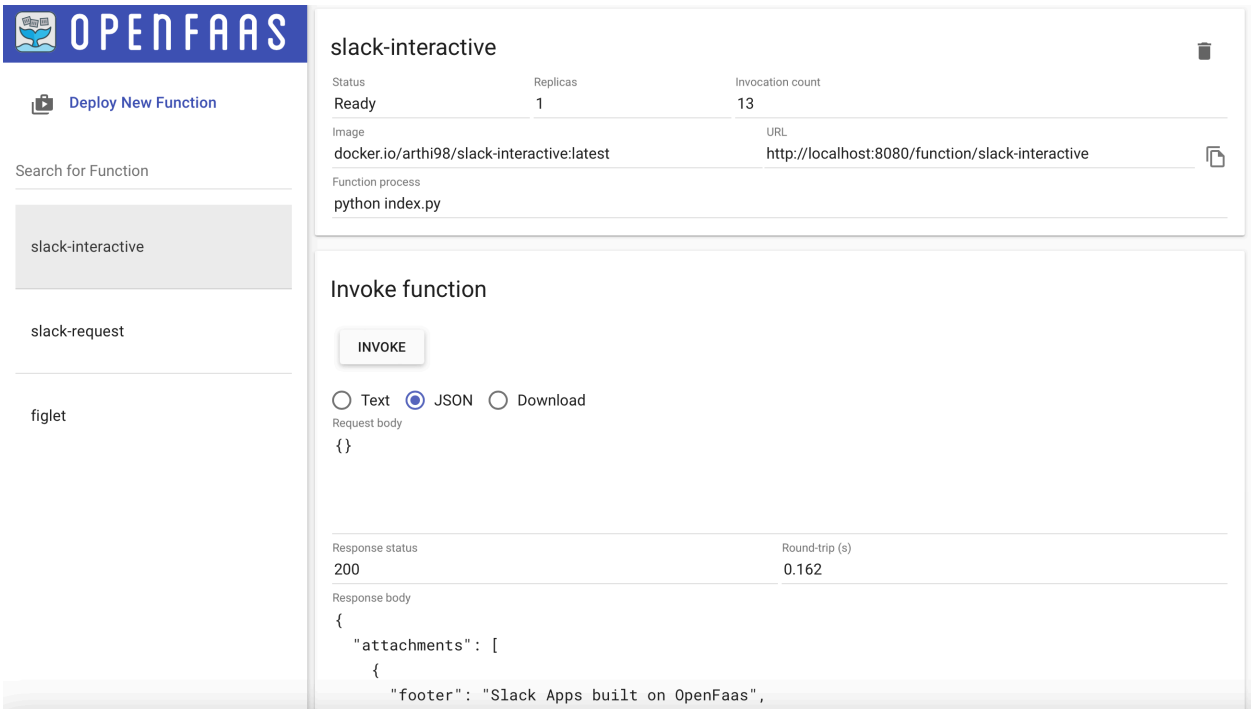


Screenshot of invoking slack-interactive and slack-request functions:

The commands used were:
faas-cli invoke slack-interactive (Input provided : {})
faas-cli invoke slack-request (No input required)



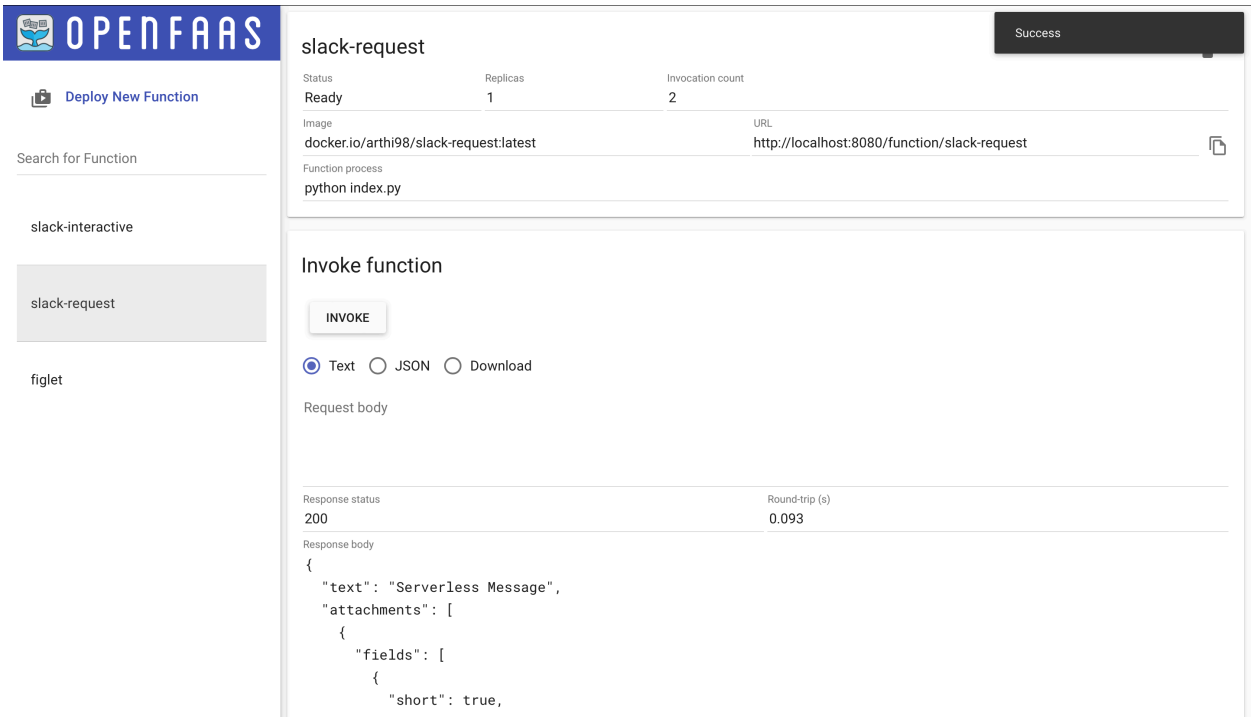
Screenshot of invoking slack-interactive through OpenFaas gateway:



Response body

```
{
  "attachments": [
    {
      "footer": "Slack Apps built on OpenFaas",
      "author_link": "https://github.com/Arthi-K",
      "color": "#36a64f",
      "text": "Head over to COEN 241",
      "title": "COEN 241",
      "ts": 123456789,
      "author_name": "Arthi",
      "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-
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": "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/department-of-computer-
engineering/graduate/course-descriptions/",
      "author_icon": "https://avatars.githubusercontent.com/u/81531516?
s=400&u=de6c8ba999f3bb816b70cef6cb43df70e155efc3&v=4"
    }
  ]
}
```

Screenshot of invoking slack-request functions:




```
      "image_url": "https://avatars.githubusercontent.com/u/81531516?
s=400&u=de6c8ba999f3bb816b70cef6cb43df70e155efc3&v=4",
      "author_name": "Arthi",
      "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": "#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"
    }
  ]
```