COEN 241: HW 2 Own Serverless Infrastructure

Name : Surya Kiran U

ID: W1610385

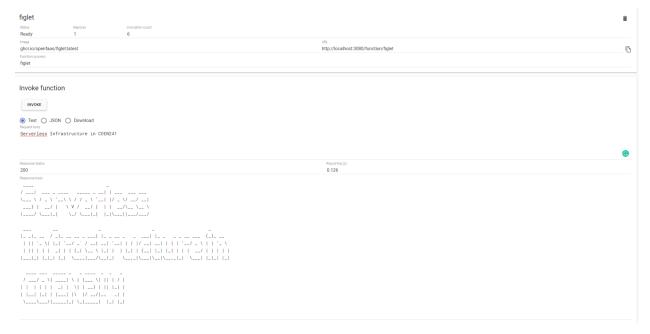
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- 1. Screenshot of invoking the figlet function:
 - a) Via cli: Invoke the function using the command: "faas-cli invoke figlet" Gives the output of the input string in the style shown below.



- b) Via OpenFaas Portal: Invoke the function by giving input text.
 - > "Serverless Infrastructure in COEN241"



```
2. Complete slack-request/handler.py:
   #Importing required libraries
   import json
   #Function to handle the request
   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
           }],
           #Input of author name and URL of author image
           "author_name": "Surya",
           "author_icon": "https://imgur.com/a/NL7nTRF",
           "image url": "https://imgur.com/a/NL7nTRF"
           },
           "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"
                  }
           1
                         }
                  }]
```

```
3. Complete slack-interactive/handler.py:
#Importing required libraries
import json
import urllib
#Function to handle the request
def handle(req):
       #Setting the page encoding as UTF-8 and getting the req
       urlstring = urllib.unguote(reg).decode('utf8').strip('payload=')
       #Loading the URL
       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": "Surya",
              "author link": "http://github.com/skiranu/COEN241-HW2",
              "author_icon": "https://imgur.com/a/NL7nTRF",
              "title": "COEN 241",
              "title link":
"https://www.scu.edu/engineering/academic-programs/department-of-computer-engineering/gra
duate/course-descriptions/",
              "text": "Head over to COEN 241",
              "image url":
"https://www.scu.edu/media/offices/umc/scu-brand-guidelines/visual-identity-amp-photography/v
isual-identity-toolkit/logos-amp-seals/Mission-Dont3.png",
              "thumb url":
"https://www.scu.edu/engineering/academic-programs/department-of-computer-engineering/gra
duate/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)
```

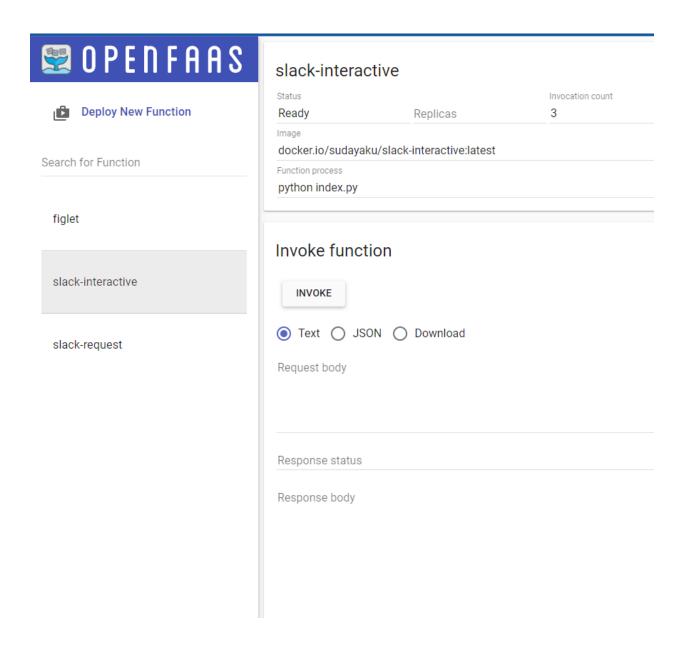
4. Provide a screenshot of running the following command:

sudo journalctl -u faasd --lines 40

```
unctions$ sudo journalctl -u faasd --lines 40
```

Gives the logs of the faas system, we are limiting the output to 40 lines, which have the information about the start-up order, nats, queue-worker, authentication plugin, Prometheus and gateway, and also the proxy port information.

5. Provide a screenshot of your OpenFaaS gateway AFTER deploying figlet, slack-handler and slack-interactive functions:

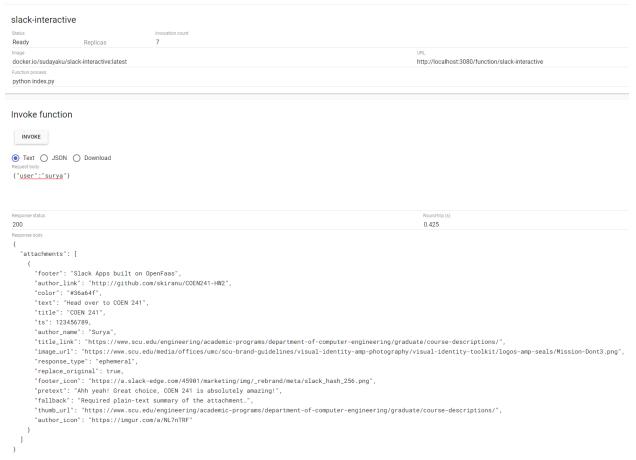


The screenshot contains the functions invoked from the VM, which can be accessed through localhost 8080 or the forwarded port(3080) from the Host machine.

Provide a screenshot of invoking slack-interactive and slack-request functions
 Invoking slack-interactive via cli in VM : echo '{"user":"surya"}' | faas-cli invoke slack-interactive

skigsi-Virtualoo::-/functions\$ echo '{"user":"Surya"}' | faas-cli invoke slack-interactive
("attachments': [("footer': "slack Apps built on OpenFaas", "author_link": "http://github.com/skiranu/COEN241-HW2", "color": "#36a64f", "text": "Head over to COEN 241", "title":
"COEN 241", "ts': 123456789, "author_name: "Surya", "title link': "https://jwww.scu.edu/engineering/academic-programs/department-of-computer-engineering/graduate/course-descripti
ons/", "inage_url': "https://www.scu.edu/media/offices/unc/scu-brand-guidelines/visual-identity-amp-photography/visual-identity-toolkit/logos-amp-seals/Misston-Donats.png", "response_type": "ephemeral", "replace_original": true, "footer_icon": "https://a.slack-edge.com/45901/marketing/ing/_ebrand/meta/slack_hash_256.png", "pretext": "Ahh yeahl 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/com*se-descriptions/", "author_icon': "https://lagu.com/a/NL7nTR"]]

6.2) Invoking slack-interactive via OpenFass Portal:



6.3) Invoking slack-request via cli in VM: echo surya | faas-cli invoke slack-request

6.4) Invoking slack-request via OpenFass Portal: Login into the localhost 8080/host machines localhost 3080 after port forwarding to invoke the openFaas functions.

