

COEN 241: Homework 2

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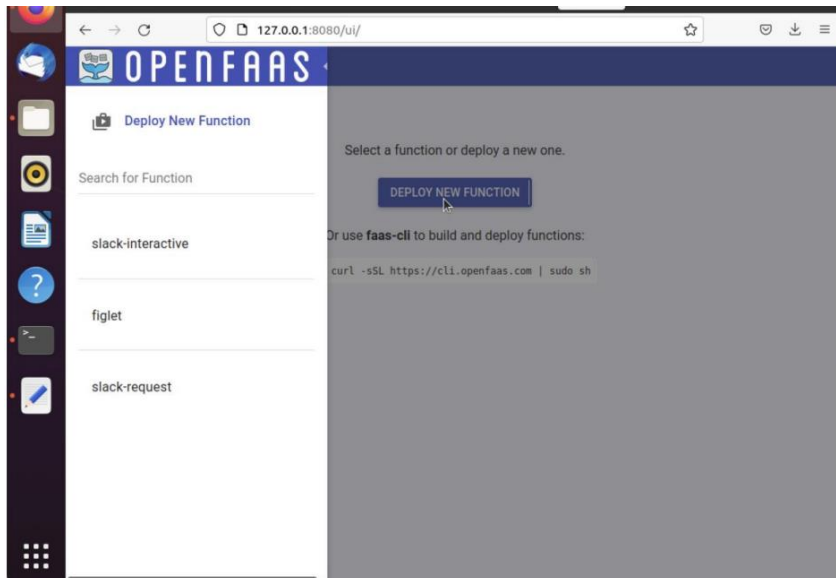
1) Invoking the Figlet Command

```
preeti@preeti-Inspiron-15-3511:~/faasd$ echo "Hello, FaaS, world" | faas-cli invoke figlet
Hello, FaaS, world
preeti@preeti-Inspiron-15-3511:~/faasd$
```

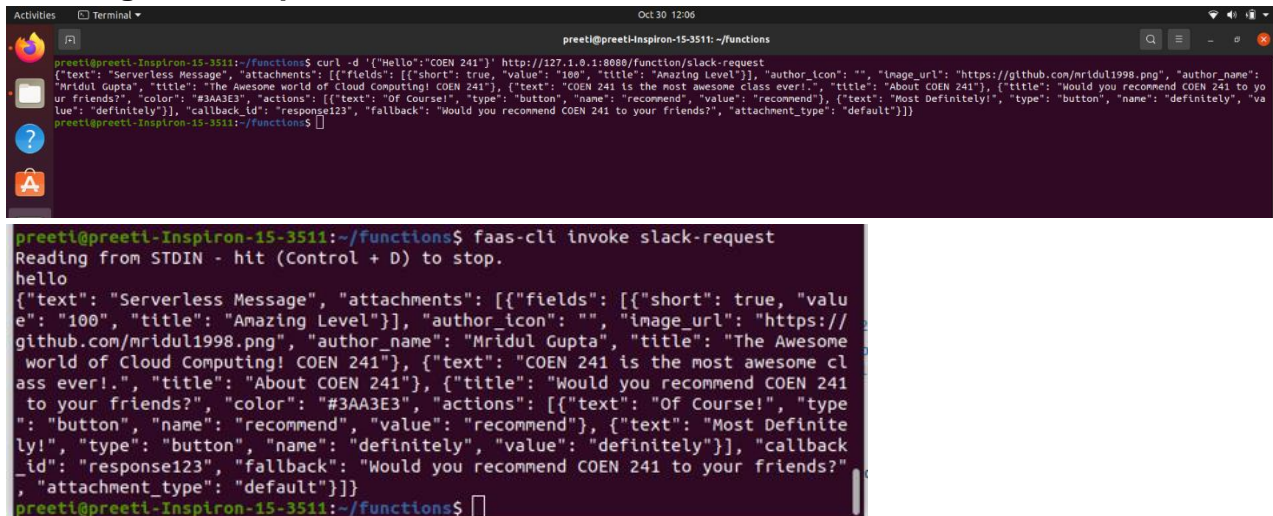
2) Running sudo journalctl -u faasd --lines 40

```
preeti@preeti-Inspiron-15-3511:~/faasd$ sudo journalctl -u faasd --lines 40
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 - gateway
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 - queue-worker
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: Starting: nats
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: Creating local directory: /var/lib/faasd/nats
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 Running nats with user: "55534"
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 Created container: nats
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 nats has IP: 10.02.0.2
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 task: nats
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: Container: nats
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: Starting: prometheus
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: Creating local directory: /var/lib/faasd/prometheus
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 Running prometheus with user: "55534"
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 Created container: prometheus
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 prometheus has IP: 10.02.0.4
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 Task: basic-auth-plugin
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: Container: prometheus
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: Starting: basic-auth-plugin
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 Created container: basic-auth-plugin
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 basic-auth-plugin has IP: 10.02.0.4
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 Task: basic-auth-plugin
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: Container: basic-auth-plugin
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: Starting: gateway
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 Created container: gateway
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 gateway has IP: 10.02.0.1
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 task: gateway
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: Container: gateway
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: Starting: queue-worker
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 Created container: queue-worker
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 queue-worker has IP: 10.02.0.0
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 task: queue-worker
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: Container: queue-worker
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 Supervisor text done (at 2 second
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 Looking up IP for: "gateway"
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 Resolver rebuilding map
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 Looking up IP for: "prometheus"
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 Resolver: "localhost": "127.0.0.1"
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 Resolver: "faasd-gateway": "10.02.0.1"
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 Resolver: "nats": "10.02.0.2"
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 Resolver: "prometheus": "10.02.0.4"
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 Resolver: "basic-auth-plugin": "10.02.0.4"
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 Resolver: "gateway": "10.02.0.1"
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 faasd: waiting for SIGTERM or SIGINT
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:42 Proxy from: 127.0.0.1:8080, to: prometheus:9090 (10.02.0.1)
Oct 29 18:01:42 preeti-Inspiron-15-3511 faasd[932]: 2022/10/29 18:01:44 Proxy from: 0.0.0.0:8080, to: gateway:8080 (10.02.0.1)
preeti@preeti-Inspiron-15-3511:~/faasd$
```

3) OpenFaaS Gateway screenshot AFTER deploying Figlet,slack-handler and slackinteractive functions



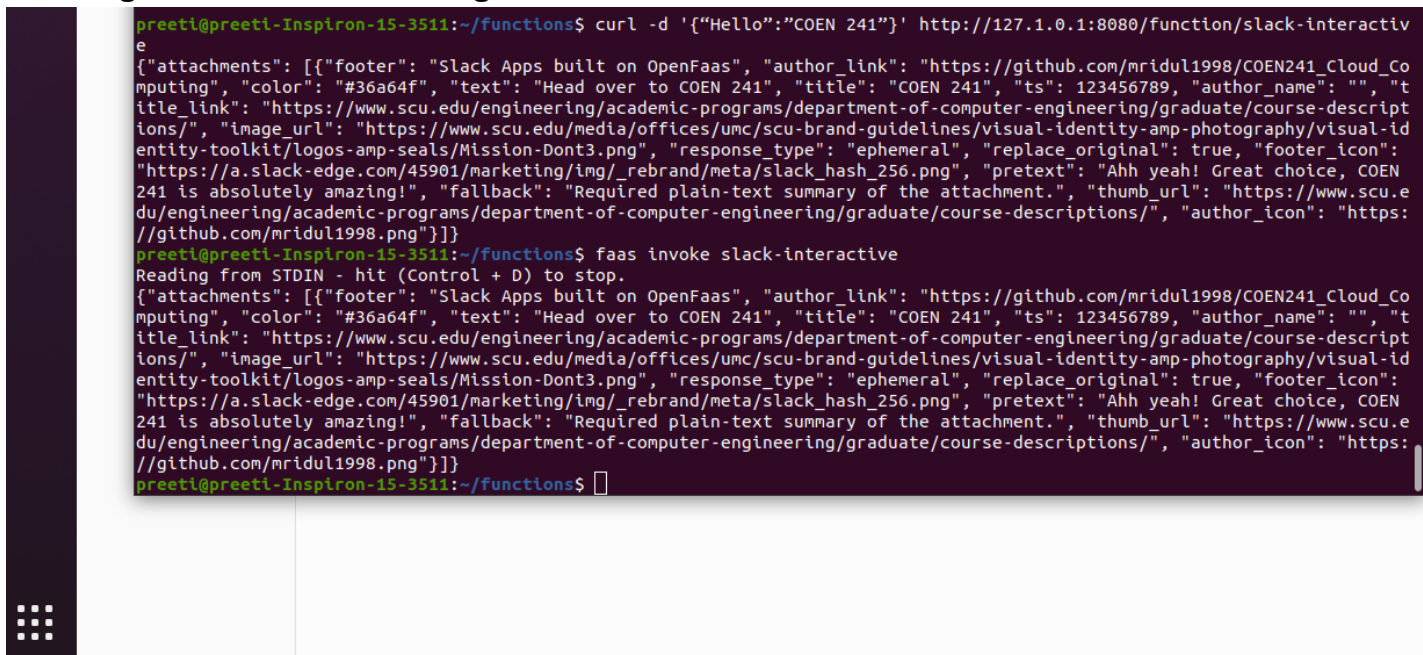
4) Invoking slack-request function via curl and faas-cli



```
preeti@preeti-Inspiron-15-3511:~/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/mridul1998.png", "author_name": "Mridul Gupta", "title": "The Awesome world of Cloud Computing! COEN 241"}, {"text": "COEN 241 is the most awesome class ever!.", "title": "About COEN 241"}, {"text": "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"}]}

preeti@preeti-Inspiron-15-3511:~/functions$ faas-cli invoke slack-request
Reading from STDIN - hit (Control + D) to stop.
hello
{"text": "Serverless Message", "attachments": [{"fields": [{"short": true, "value": "100", "title": "Amazing Level"}], "author_icon": "", "image_url": "https://github.com/mridul1998.png", "author_name": "Mridul Gupta", "title": "The Awesome world of Cloud Computing! COEN 241"}, {"text": "COEN 241 is the most awesome class ever!.", "title": "About COEN 241"}, {"text": "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"}]}
```

5) Invoking slack-interactive using curl and faas-cli



```
preeti@preeti-Inspiron-15-3511:~/functions$ curl -d '{"Hello":"COEN 241"}' http://127.1.0.1:8080/function/slack-interactive
{"attachments": [{"footer": "Slack Apps built on OpenFaas", "author_link": "https://github.com/mridul1998/COEN241_Cloud_Computing", "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-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://github.com/mridul1998.png"}]}

preeti@preeti-Inspiron-15-3511:~/functions$ faas invoke slack-interactive
Reading from STDIN - hit (Control + D) to stop.
{"attachments": [{"footer": "Slack Apps built on OpenFaas", "author_link": "https://github.com/mridul1998/COEN241_Cloud_Computing", "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-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://github.com/mridul1998.png"}]}

preeti@preeti-Inspiron-15-3511:~/functions$
```