

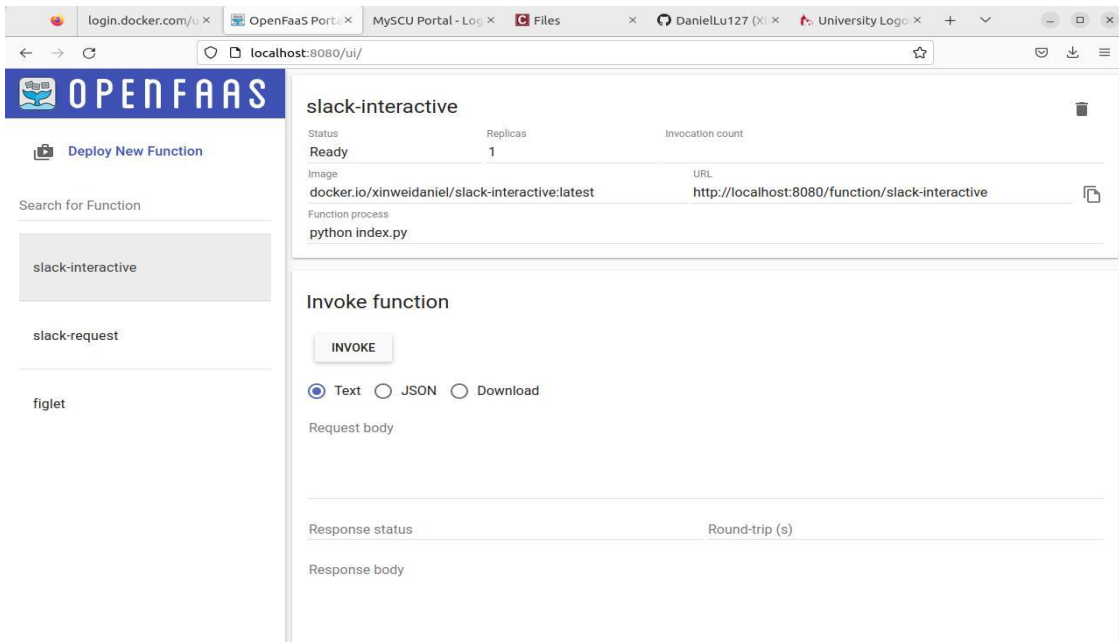
1. Screenshot of invoking the figlet function

```
daniel@daniel-virtual-machine:~/Desktop/faasd$ echo "Hello, Faas, World" | faas-cli invoke figlet
Hello, Faas, World
daniel@daniel-virtual-machine:~/Desktop/faasd$ mkdir -p ~/functions && cd ~/functions
daniel@daniel-virtual-machine:~/functions$ ls
daniel@daniel-virtual-machine:~/functions$ faas-cli new --lang python slack-request
2022/10/31 20:48:27 No templates found in current directory.
2022/10/31 20:48:27 Attempting to expand templates from https://github.com/openfaas/templates.git
2022/10/31 20:48:29 Fetched 17 template(s) : [csharp dockerfile go java11 java11-vert-x node node12 node12-debian node14 node16 node17 php7 php8 p
an ruby] from https://github.com/openfaas/templates.git
Folder: slack-request created.
```

2. Screenshot of running sudo journalctl -u faasd --lines 40

```
daniel@daniel-virtual-machine:~/functions$ sudo journalctl -u faasd --lines 40
Oct 31 20:18:49 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:49 - gateway
Oct 31 20:18:49 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:49 - queue-worker
Oct 31 20:18:49 daniel-virtual-machine faasd[5165]: Starting: basic-auth-plugin
Oct 31 20:18:49 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:49 Created container: basic-auth-plugin
Oct 31 20:18:50 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:50 basic-auth-plugin has IP: 10.62.0.2
Oct 31 20:18:50 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:50 Task: basic-auth-plugin Container: basic-auth-plugin
Oct 31 20:18:50 daniel-virtual-machine faasd[5165]: Starting: nats
Oct 31 20:18:50 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:50 Creating local directory: /var/lib/faasd/nats
Oct 31 20:18:50 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:50 Running nats with user: "65534"
Oct 31 20:18:50 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:50 Created container: nats
Oct 31 20:18:51 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:51 nats has IP: 10.62.0.3
Oct 31 20:18:51 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:51 Task: nats Container: nats
Oct 31 20:18:51 daniel-virtual-machine faasd[5165]: Starting: prometheus
Oct 31 20:18:51 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:51 Creating local directory: /var/lib/faasd/prometheus
Oct 31 20:18:51 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:51 Running prometheus with user: "65534"
Oct 31 20:18:51 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:51 Created container: prometheus
Oct 31 20:18:51 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:51 prometheus has IP: 10.62.0.4
Oct 31 20:18:51 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:51 Task: prometheus Container: prometheus
Oct 31 20:18:51 daniel-virtual-machine faasd[5165]: Starting: gateway
Oct 31 20:18:51 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:51 Created container: gateway
Oct 31 20:18:52 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:52 gateway has IP: 10.62.0.5
Oct 31 20:18:52 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:52 Task: gateway Container: gateway
Oct 31 20:18:52 daniel-virtual-machine faasd[5165]: Starting: queue-worker
Oct 31 20:18:52 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:52 Created container: queue-worker
Oct 31 20:18:52 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:52 queue-worker has IP: 10.62.0.6
Oct 31 20:18:52 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:52 Task: queue-worker Container: queue-worker
Oct 31 20:18:52 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:52 Supervisor init done in: About a minute
Oct 31 20:18:52 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:52 Looking up IP for: "gateway"
Oct 31 20:18:52 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:52 Looking up IP for: "prometheus"
Oct 31 20:18:52 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:52 Resolver rebuilding map
Oct 31 20:18:52 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:52 Resolver: "localhost"="127.0.0.1"
Oct 31 20:18:52 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:52 Resolver: "faasd-provider"="10.62.0.1"
Oct 31 20:18:52 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:52 Resolver: "basic-auth-plugin"="10.62.0.2"
Oct 31 20:18:52 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:52 Resolver: "nats"="10.62.0.3"
Oct 31 20:18:52 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:52 Resolver: "prometheus"="10.62.0.4"
Oct 31 20:18:52 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:52 Resolver: "gateway"="10.62.0.5"
Oct 31 20:18:52 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:52 Resolver: "queue-worker"="10.62.0.6"
Oct 31 20:18:52 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:52 faasd: waiting for SIGTERM or SIGINT
Oct 31 20:18:53 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:53 Proxy from: 0.0.0.0:8080, to: gateway:8080 (10.62.0.5)
Oct 31 20:18:53 daniel-virtual-machine faasd[5165]: 2022/10/31 20:18:53 Proxy from: 127.0.0.1:9090, to: prometheus:9090 (10.62.0.4)
daniel@daniel-virtual-machine:~/functions$
```

3. Screenshot of my OpenFaaS gateway AFTER deploying figlet, slack-handler and slack-interactive functions



4. Screenshot of invoking slack-request function using curl and FaaS CLI

```
daniel@daniel-virtual-machine:~/functions$ echo "Hello Slack" | faas-cli invoke slack-request
{"text": "Serverless Message", "attachments": [{"fields": [{"short": true, "value": "100", "title": "Amazing Level"}], "author_icon": "", "image_url": "https://www.scu.edu/media/offices/unc/scu-brand-guidelines/visual-identity-amp-photography/visual-identity-toolkit/logos-amp-seals/Mission-PMS201.png", "author_name": "Xinwei Lu", "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"}]}
daniel@daniel-virtual-machine:~/functions$
daniel@daniel-virtual-machine:~/functions$ curl http://localhost:8080/function/slack-request --data "Hello"
{"text": "Serverless Message", "attachments": [{"fields": [{"short": true, "value": "100", "title": "Amazing Level"}], "author_icon": "", "image_url": "https://www.scu.edu/media/offices/unc/scu-brand-guidelines/visual-identity-amp-photography/visual-identity-toolkit/logos-amp-seals/Mission-PMS201.png", "author_name": "Xinwei Lu", "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"}]}
daniel@daniel-virtual-machine:~/functions$
```

5. Screenshot of invoking slack-interactive function using curl and FaaS CLI

```
daniel@daniel-virtual-machine:~/functions$ curl http://localhost:8080/function/slack-interactive --data '{"key":"value"}'
{"attachments": [{"footer": "Slack Apps built on OpenFaaS", "author_link": "https://github.com/DanielLu127/COEN241", "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/unc/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 plaintext 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/DanielLu127.png"}]}
daniel@daniel-virtual-machine:~/functions$
daniel@daniel-virtual-machine:~/functions$ echo '{"key":"value"}' | faas-cli invoke slack-interactive
{"attachments": [{"footer": "Slack Apps built on OpenFaaS", "author_link": "https://github.com/DanielLu127/COEN241", "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/unc/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 plaintext 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/DanielLu127.png"}]}
daniel@daniel-virtual-machine:~/functions$
```