

COEN 241: HW - 2

1. What is the command to invoke the slack-request function (4 pts)?

a. Via Curl

\$curl -d '{"Hello":"COEN 241"}' <http://127.1.0.1:8080/function/slack-request>

b. Via faas-cli

faas-cli invoke slack-request

2. What is the output you see when you invoke the slack-request function? (2 pts)

```
ubuntu@ubuntu:~/functions$ echo "Running" | sudo faas-cli invoke slack-request
{"text": "Serverless Message", "attachments": [{"fields": [{"short": true, "value": "100", "title": "Amazing Level"}], "author_icon": "", "image_url": "https://github.com/benitarego.png", "author_name": "Benita Rego", "title": "The Awesome world of Cloud Computing! COEN 241", {"text": "COEN 241 is my favourite class and I enjoy it!", "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"}]}

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buntu@ubuntu:~/functions$8080/function/slack-request N 241
{"text": "Serverless Message", "attachments": [{"fields": [{"short": true, "value": "100", "title": "Amazing Level"}], "author_icon": "", "image_url": "https://github.com/benitarego.png", "author_name": "Benita Rego", "title": "The Awesome world of Cloud Computing! COEN 241", {"text": "COEN 241 is my favourite class and I enjoy it!", "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"}]}
```

3. What is the command to invoke the slack-interactive function? (4 pts)

a. Via curl

\$curl -d '{"Hello":"COEN 241"}' <http://127.0.0.1:8080/function/slack-interactive>

b. Via faas-cli

\$faas-cli invoke slack-interactive

4. What is the output you see when you invoke the slack-interactive function? (2 pts)

```
ubuntu@ubuntu:~/functions$ faas-cli invoke slack-interactive
Reading from STDIN - hit (Control + D) to stop.
{"attachments": [{"footer": "Slack Apps built on OpenFaas", "author_link": "https://github.com/benitarego/COEN-241-CC.git", "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-and-photography/visual-identity-toolkit/logos-and-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": "Yes! That's an amazing choice, COEN 241 is 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/benitarego.png"}]}

8080/function/slack-interactive curl -d '{"Hello":"COEN 241"}' http://127.0.0.1:
{"attachments": [{"footer": "Slack Apps built on OpenFaas", "author_link": "https://github.com/benitarego/COEN-241-CC.git", "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-and-photography/visual-identity-toolkit/logos-and-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": "Yes! That's an amazing choice, COEN 241 is 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/benitarego.png"}]}
```

5. How would you pass different arguments to the functions? (4 pts)

Following are some of the ways of passing arguments to functions.

- curl -d '{"Hello": "COEN 241"}' <http://127.0.0.1:8080/function/slack-interactive>
The above command sends the specified data in a POST request to an HTTP server.
- echo "Hello, FaaS World" | faas-cli invoke figlet

Here, we invoke the figlet function using faas-cli and the argument given to the function is "Hello, FaaS World".
We can also use the openfaas UI.

6. How would you change the slack-interactive function to react to different inputs? (4 pts)
Any string may be converted into a URL using the default UTF-8 encoding by using urllib. To convert a valid JSON string, such as a urlstring, into a Python dictionary, use the json.load() function. Similar to API endpoints are the functions. To the function that is called with the req argument and decoded using the aforementioned libraries, we transmit the request. Using various api methods of the aforementioned libraries, different requests may be extracted. Various parameters may be sent to the functions for testing using api testing tools like Postman. Data is returned to the requesting client using json.dumps.