

HW2 - COEN 241 Q&A

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

a. Via Curl

Via curl – curl -d '{"Hello": "COEN 241"}' http://127.1.0.1:8080/function/slack-request

b. Via faas-cli

Via faas-cli – faas-cli invoke slack-request

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

a. \$faas-cli invoke slack-request

```
nrego@nrego:~/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/nolita26.png", "author_name": "Nolita 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"}]}
nrego@nrego:~/functions$
```

b. sudo curl -d '{"Hello": "COEN 241"}' http://127.1.0.1:8080/function/slack-request

```
nrego@nrego:~/functions$ sudo 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/nolita26.png", "author_name": "Nolita 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"}]}
nrego@nrego:~/functions$
```

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

a. Via curl

curl - curl -d '{"Hello": "COEN 241"}' http://127.1.0.1:8080/function/slack-interactive

b. Via faas-cli

faas-cli – faas-cli invoke slack-interactive

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

a. \$faas-cli invoke slack-interactive

```
nrego@nrego:~/functions$ echo "Running" | sudo faas-cli invoke slack-interactive
{"attachments": [{"footer": "Slack Apps built on OpenFaas", "author_link": "http
s://github.com/nolita26/COEN241.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-engi
neering/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", "repl
ace_original": true, "footer_icon": "https://a.slack-edge.com/45901/marketing/im
g/_rebrand/meta/slack_hash_256.png", "pretext": "Yes! That's an amazing choice,
COEN 241 is amazing!", "fallback": "Required plain-text summary of the attachmen
t.", "thumb_url": "https://www.scu.edu/engineering/academic-programs/department-
of-computer-engineering/graduate/course-descriptions/", "author_icon": "https://
github.com/nolita26.png"}]}
nrego@nrego:~/functions$
```

b. `sudo curl -d '{"Hello": "COEN 241"}' http://127.1.0.1:8080/function/slack-interactive`

```
nrego@nrego:~/functions$ sudo curl -d '{"Hello": "COEN 241"}' http://127.1.0.1:8
080/function/slack-interactive
{"attachments": [{"footer": "Slack Apps built on OpenFaas", "author_link": "http
s://github.com/nolita26/COEN241.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-engi
neering/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", "repl
ace_original": true, "footer_icon": "https://a.slack-edge.com/45901/marketing/im
g/_rebrand/meta/slack_hash_256.png", "pretext": "Yes! That's an amazing choice,
COEN 241 is amazing!", "fallback": "Required plain-text summary of the attachmen
t.", "thumb_url": "https://www.scu.edu/engineering/academic-programs/department-
of-computer-engineering/graduate/course-descriptions/", "author_icon": "https://
github.com/nolita26.png"}]}
nrego@nrego:~/functions$
```

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

Function parameters can be passed in a variety of ways. For instance, the following is the output of the slack-interactive curl command:

`sudo curl -d '{"Hello": "COEN 241"}' http://127.1.0.1:8080/function/slack-interactive`

The aforementioned command performs a POST request to an HTTP server with the provided data. Another approach is to utilize echo, as seen by the example below:

`echo "Hello, FaaS World" | faas-cli invoke figlet`

Here, we use faas-cli to call the figlet function, and the function's parameter is "Hello,FaaS World." The openfaas UI allows us to pass parameters as well.

6. How would you change the slack-interactive function to react to different inputs? (4 pts)

We can see that handler.py in the package urllib contains a definition for the unquote function (slack-interactive function). Any string can be converted into a URL using this method. The UTF-8 encoding is the standard. The next step is to convert a valid JSON string, like urlstring, into such a Python dictionary using the json.load() method. The answer

contains a record of this data. After storing it, we notice that we aren't using it anywhere. The `slack-interactive` function can be updated in our application using the solution to respond to various inputs. `Response` is likewise a Python dictionary, thus it may be used inside the data. As an outcome, the function will start responding to different inputs when we return `json.dumps(data)`.