

COEN 241: Assignment 3: Question and Answers

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

- a. Via Curl
- b. Via faas-cli

ANS-

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

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

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

ANS -

```
manasibendale@manasibendale-VirtualBox:~/functions$ faas-cli invoke slack-request
Reading from STDIN - hit (Control + D) to stop.
{"text": "Serverless Message", "attachments": [{"fields": [{"short": true, "value": "100", "title": "Amazing Level"}], "author_icon": "", "image_url": "https://github.com/ManasiBendale.png", "author_name": "Manasi Bendale", "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"}]}
'''
'''
manasibendale@manasibendale-VirtualBox:~/functions$
```

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

- a. Via curl
- b. Via faas-cli

ANS -

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

faas-cli – `faas-cli invoke slack-interactive`

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

ANS -

```
manasibendale@manasibendale-VirtualBox: ~/functions
File "/usr/local/lib/python2.7/json/decoder.py", line 364, in decode
  obj, end = self.raw_decode(s, idx=_w(s, 0).end())
File "/usr/local/lib/python2.7/json/decoder.py", line 382, in raw_decode
  raise ValueError("No JSON object could be decoded")
ValueError: No JSON object could be decoded

manasibendale@manasibendale-VirtualBox:~/functions$ faas-cli invoke slack-interactive
Reading from STDIN - hit (Control + D) to stop.
"Hi"
{"attachments": [{"footer": "Slack Apps built on OpenFaaS", "author_link": "http://github.com/ManasiBendale/Cloud_Computing.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": "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/ManasiBendale.png"}]}
```

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

ANS -

There are multiple methods for providing input values to functions. One way is to use a command-line tool like curl to send data in a POST request to an HTTP server.

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

Another approach is to use the echo command to provide arguments to a function when invoking it using a tool like faas-cli.

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".

Additionally, arguments can also be passed to functions through the openfaas user interface.

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

ANS -

The urllib package contains the unquote function which can be used to decode any string into a URL using the default encoding of UTF-8. The json.load() method is then used to convert a valid JSON string (like urlstring) into a Python dictionary, which is stored in the response variable. While the response is not used in the code, it can be

utilized to update the slack-interactive function to respond differently to various inputs. Since response is also a Python dictionary, it can be used inside the data dictionary. By returning `json.dumps(data)`, the function can respond to different inputs.