

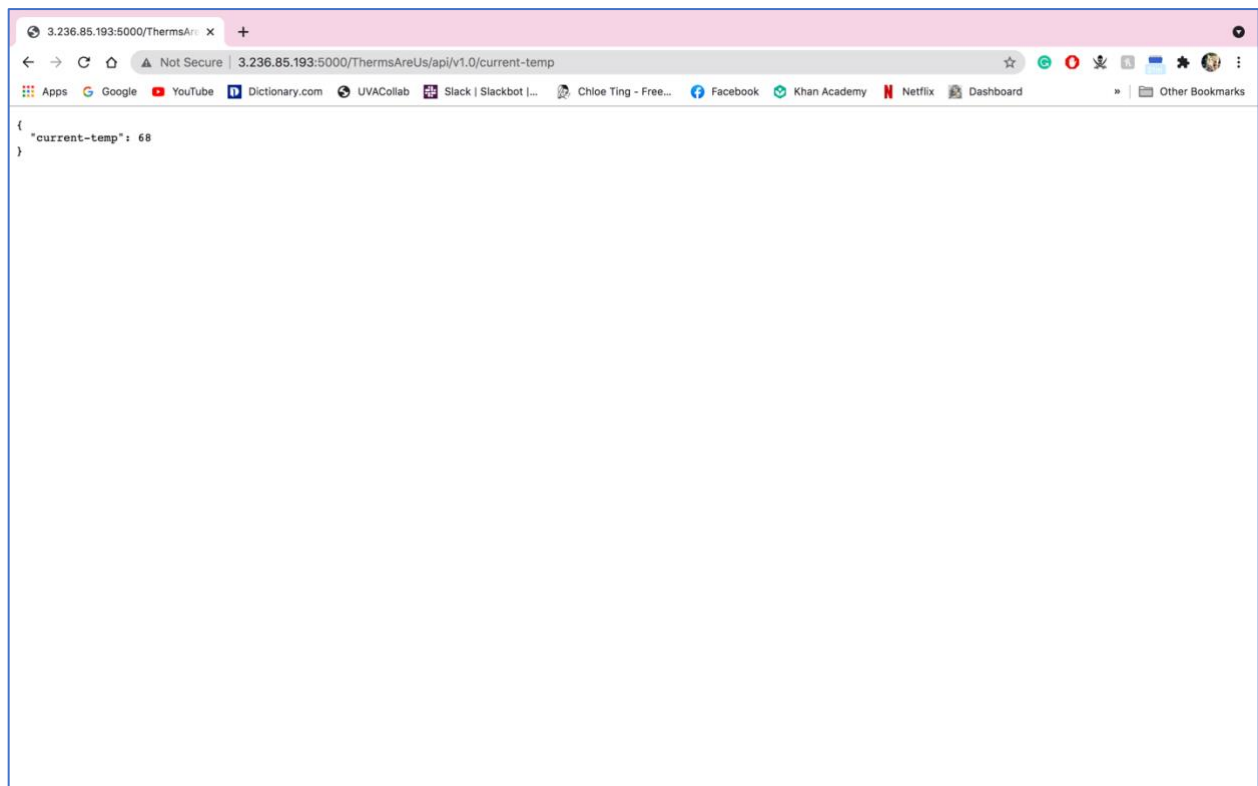
CS4740 Spring 2021 Cloud Computing PA#3

Name: Victoria Wang

UVa User ID: vxw6ta

Instructions: Fill in your answers to the 5 questions and **SUBMIT A PDF to collab (along with the source code requested in Question 1 and your source code requested in Question 5)**

1. **[20 points]** After completing Part 1 (“Simulating the thermostat”), cut-and-paste a screenshot of a browser screen (full width of page) to [http://\[hostname\]/ThermsAreUs/api/v1.0/current-temp](http://[hostname]/ThermsAreUs/api/v1.0/current-temp). To receive full credit, the URL must be legible in the screenshot. If you were unable to complete this part, explain how far you were able to get and describe the problem (you were unable to debug). **ALSO attach the source code for your thermostat simulator to your collab submission (if multiple files, then ZIP format).**



2. **[20 points]** After completing Part 2 (“Getting familiar with Alexa”), cut-and-paste **two** browser screens: **[1]** (full width of page) when you go to the “Test” tab and engage your service. To receive full credit, both the “JSON Input” and “JSON Output” must be shown, and your name (initials) must be shown in the upper right of the image (as displayed in the Alexa Developer Console). **[2]** The CloudWatch logs when you go to the “Code” tab, click on the CloudWatch link (under “Code”), and then click on the most recent log (thereby showing events such as “START”, “END”, and “REPORT”).

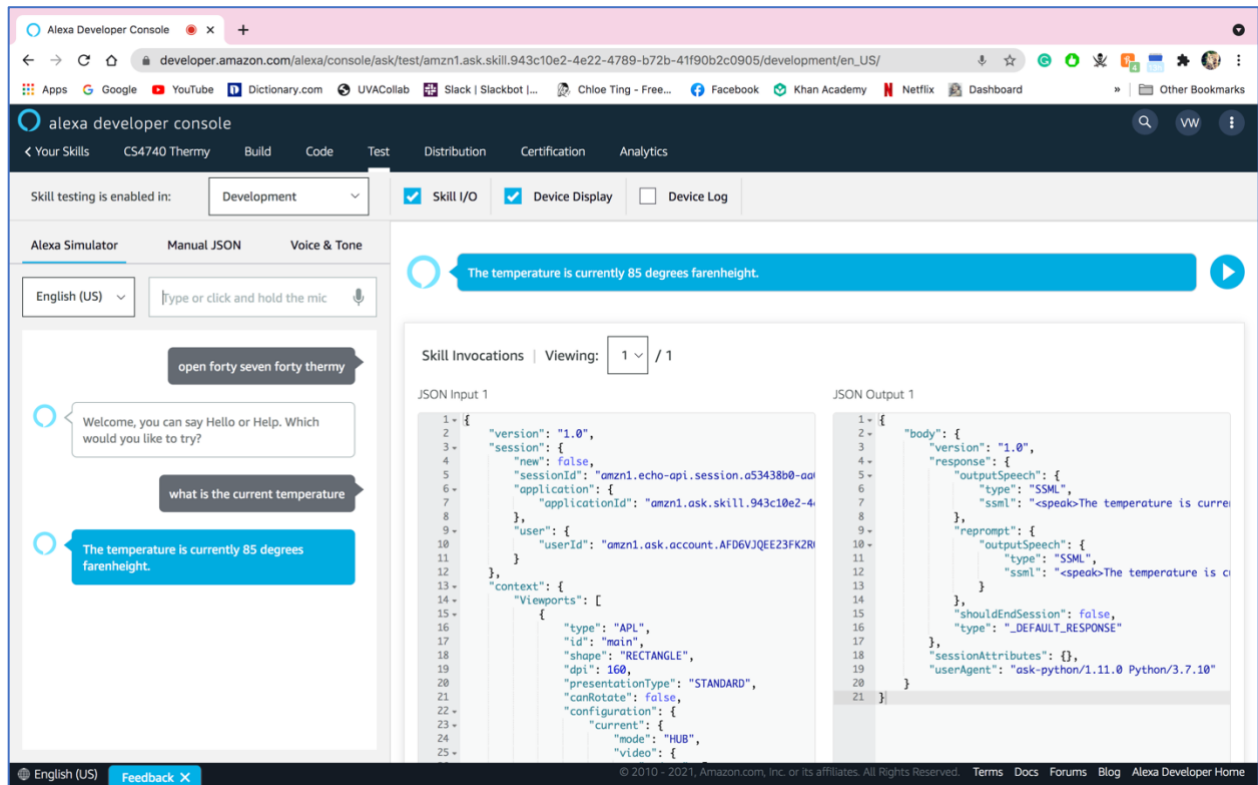
If you were unable to complete this part, explain how far you were able to get and describe the problem (you were unable to debug).

The screenshot shows the Alexa Developer Console interface. The top navigation bar includes links for 'Your Skills', 'Build', 'Code', 'Test', 'Distribution', 'Certification', and 'Analytics'. The 'Test' tab is active, showing 'Skill testing is enabled in: Development'. Below this, there are checkboxes for 'Skill I/O', 'Device Display', and 'Device Log'. The 'Alexa Simulator' section is visible, with a text input field containing 'open forty seven forty hello world'. A blue speech bubble shows the response: 'Welcome, you can say Hello or Help. Which would you like to try?'. The 'Skill Invocations' section shows 'Viewing: 1 / 1'. The 'JSON Input 1' and 'JSON Output 1' are displayed. The JSON input is a standard Alexa skill invocation request, and the JSON output is the corresponding response from the skill.

The screenshot shows the AWS CloudWatch console. The left sidebar contains a navigation menu with options like 'Dashboards', 'Alarms', 'Logs', 'Metrics', 'Events', 'Rules', 'Event Buses', 'ServiceLens', 'Container Insights', 'Lambda Insights', 'Synthetics', and 'Contributor Insights'. The 'Logs' section is selected, showing a list of log groups. The selected log group is '/aws/lambda/8469f148-083c-4942-b4fe-0af2212ce6a9'. The 'Log events' section is displayed, showing a table of log events. The table has columns for 'Timestamp' and 'Message'. The events are as follows:

Timestamp	Message
2021-03-22T04:12:39.785-04:00	START RequestId: 63ec8336-e505-4fbf-bc91-deed3f007d05 Version: 1
2021-03-22T04:12:39.819-04:00	END RequestId: 63ec8336-e505-4fbf-bc91-deed3f007d05
2021-03-22T04:12:39.819-04:00	REPORT RequestId: 63ec8336-e505-4fbf-bc91-deed3f007d05 Duration: 33.92 ms Billed Duration: 34 ms Memory S...

3. [20 points] After completing Part 3 (“Using voice to control your thermostat”) cut-and-paste your alexa developer console browser screen (full width of page) when you go to the “TEST” page, **open our service, and ask for the current room temperature** To get full credit, both the “JSON Input” and “JSON Output” must be shown (for our service, of course). If you were unable to complete this part, explain how far you were able to get and describe the problem (you were unable to debug).



4. [20 points] Repeat Question 3, except [1] ask what the current setpoint is, [2] ask to set the thermostat to a value that is 3 more than the value returned, and then [3] ask what the current setpoint is. You **MUST** have one screenshot that shows all three questions (and answers) on the left.


```

52 ▾ class ChangeSetPointIntentHandler(AbstractRequestHandler):
53 ▾     def can_handle(self, handler_input):
54         return ask_utils.is_intent_name("ChangeSetPointIntent")(handler_input)
55
56 ▾     def handle(self, handler_input):
57         setpoint = handler_input.request_envelope.request.intent.slots["numberAnswer"].value
58         update_task(setpoint)
59         speak_output = "The setpoint is now " + str(setpoint) + " degrees farenheight."
60         return (
61             handler_input.response_builder
62                 .speak(speak_output)
63                 .ask(speak_output)
64                 .response
65         )
66
67 ▾ def getCurrentTempFromAPI():
68     url = 'http://3.236.85.193:5000/ThermsAreUs/api/v1.0/current-temp'
69     response = requests.get(url)
70     print(response.status_code) |
71
72     json_data = response.json()
73     temp = json_data['current-temp']
74     return temp
75 ▾ def getSetPointFromAPI():
76     url = 'http://3.236.85.193:5000/ThermsAreUs/api/v1.0/current-setpoint'
77     response = requests.get(url)
78     print(response.status_code)
79
80     json_data = response.json()
81     temp = json_data['current-setpoint']
82     return temp
83 ▾ def update_task(setpoint):
84     url = 'http://3.236.85.193:5000/ThermsAreUs/api/v1.0/current-setpoint'
85 ▾     return requests.put(url, json={
86         'set-temp': setpoint
87     })

```