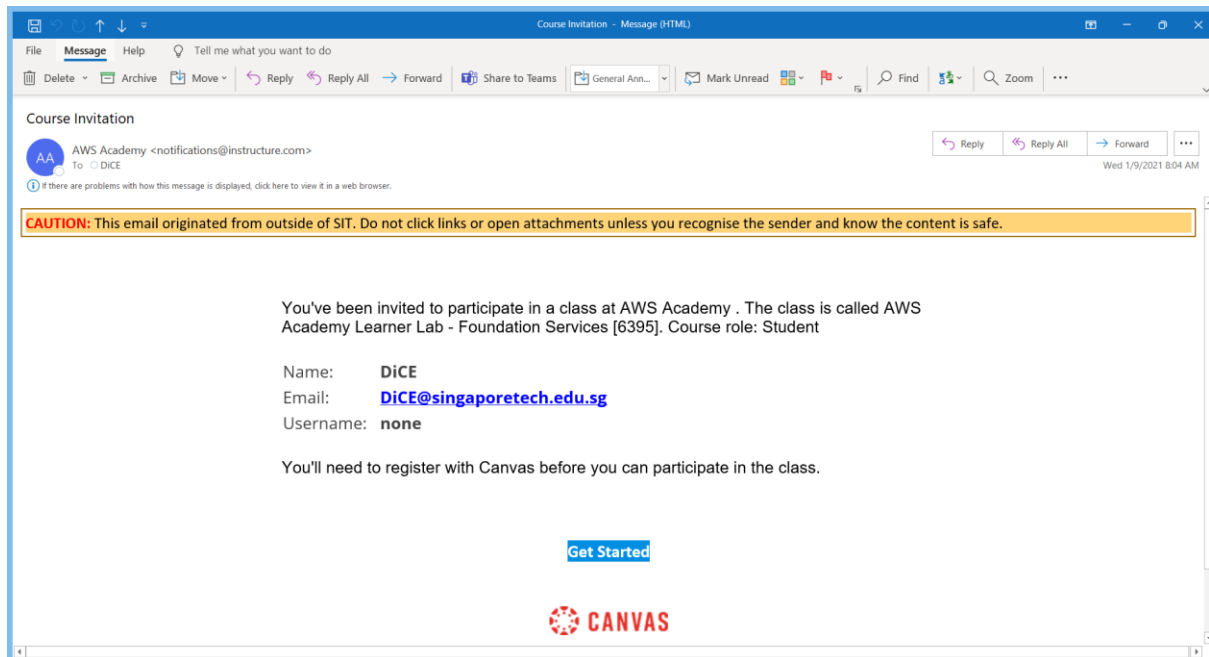


Activity Sheet



You are required to access the AWS Academy Learner Lab and utilize AWS Services such as Lambda and Amazon Lex to build your custom ChatBot and complete the **Final Assignment** of **Introduction of Cloud Computing**.

You would have received a "Course Invitation" email (as sample shown) from AWS Academy and be prompted to confirm your registered email address.



Please write to DiCE@singaporetech.edu.sg to request access to the AWS Academy Learner Lab if you don't receive the "Course Invitation" email.

Do include the following details when submitting your request to access the AWS Academy Learner Lab.

- Student ID
- Name
- Programme Code
- Programme Name
- Admit Term
- SIT Email

Point to Note

- Your budget (\$100) is limited so you should exercise caution to prevent charges that will deplete your budget too quickly.
- If you exceed your budget, you will lose access to your environment and lose all of your work.
- Each session lasts for 4 hours by default, although you can extend a session to run longer by pressing the start button to reset your session timer. At the end of each session, any resources you created in the account will be preserved.
- Some AWS resources, such as EC2 instances, may be automatically shut down, while other resources, such as RDS instances will be left running. Keep in mind that some AWS features cannot be stopped and can still incur charges.
- For example, an Elastic Load Balancer or a NAT. You may wish to delete those types of resources and recreate them as needed to test your work during a session. You will have access to this environment for the duration of the class you are enrolled in. When the class ends, your access to the learner lab will also end.

Activity Sheet



Activity Overview

Prior to this Final Assignment, you are required to complete the guided development of the Pizza ChatBot in the Topic 2. With the knowledge that you have acquired, you will be required to develop another ChatBot using the same Amazon Lex and Lambda services in the same AWS Academy module. You will need to provide the screenshots of the newly developed ChatBot to answer the questions provided

Activity Objectives

To develop a new ChatBot, you will create another Food Menu (Burger etc.) by taking reference and modifying the codes used for the Pizza ChatBot. By doing so, you will be guided by the questions provided on the area that requires the modification.

Learning Outcomes

By the end of this activity, you will be able to:

Familiarize yourself with the AWS Services such as Amazon Lex and Lambda

Create a ChatBot from scratch

Estimated Time

The estimated time required to complete the whole activity is 1 hour.

Activity Sheet



Question 1

Provide the screenshot of your **new** ChatBot Lambda Function (*In Amazon Lambda*) like the following (X: Notice the similarities with other questions)

```
// ----- Events -----  
  
function dispatch(intentRequest, callback) {  
  console.log(`request received for userId=${intentRequest.userId}, intentName=${intentRequest.currentIntent.name}`);  
  const sessionAttributes = intentRequest.sessionAttributes;  
  const slots = intentRequest.currentIntent.slots;  
  const crust = slots.crust;  
  const size = slots.size;  
  const pizzaKind = slots.pizzaKind;  
  
  callback(close(sessionAttributes, 'Fulfilled',  
    {'contentType': 'PlainText', 'content': `Okay, I have ordered your ${size} ${pizzaKind} pizza on ${crust} crust`}));  
}
```

X

Tips: Modify the area highlighted above to develop your new ChatBot to meet the requirements of the Food Menu you intend to create

Answer

```
index.mjs  x  Environment Var x  +  
  
13 }  
14  
15 // ----- Events -----  
16  
17 function dispatch(intentRequest, callback) {  
18   console.log(`request received for userId=${intentRequest.userId}, intentName=${intentRequest.currentIntent.name}`);  
19   const sessionAttributes = intentRequest.sessionAttributes;  
20   const slots = intentRequest.currentIntent.slots;  
21   const patty = slots.patty;  
22   const cheese = slots.cheese;  
23   const meal = slots.meal;  
24   const drink = slots.drink;  
25  
26   callback(close(sessionAttributes, 'Fulfilled',  
27     {'contentType': 'PlainText', 'content': `Okay, I have ordered your ${patty} burger with ${cheese} meal. The meal includes ${meal} and a ${drink} drink`}));  
28  
29 }  
30
```

Activity Sheet



Question 2

Provide the screenshot of your **new** ChatBot Lambda “Test” Function (In Amazon Lambda) like the following (X: Notice the similarities with other questions)

```
1 {
2   "messageVersion": "1.0",
3   "invocationSource": "FulfillmentCodeHook",
4   "userId": "user-1",
5   "sessionAttributes": {},
6   "bot": {
7     "name": "PizzaOrderingApp",
8     "alias": "$LATEST",
9     "version": "$LATEST"
10  },
11  "outputDialogMode": "Text",
12  "currentIntent": {
13    "name": "OrderPizza",
14    "slots": {
15      "size": "large",
16      "pizzaKind": "meat",
17      "crust": "thin"
18    },
19    "confirmationStatus": "None"
20  }
21 }
```

Bot Name

Intent Name

X

Tips: Modify the area highlighted above to develop your new ChatBot to meet the requirements of the Food Menu you intend to create

Answer

```
1 {
2   "messageVersion": "1.0",
3   "invocationSource": "FulfillmentCodeHook",
4   "userId": "user-1",
5   "sessionAttributes": {},
6   "bot": {
7     "name": "BurgerOrderingApp",
8     "alias": "$LATEST",
9     "version": "$LATEST"
10  },
11  "outputDialogMode": "Text",
12  "currentIntent": {
13    "name": "OrderBurger",
14    "slots": {
15      "patty": "Chicken",
16      "cheese": "No Cheese",
17      "meal": "French Fries",
18      "drink": "Coke"
19    },
20    "confirmationStatus": "None"
21  }
22 }
```

Activity Sheet



Question 3

Provide the screenshot of your **new** ChatBot “Slots” (In Amazon Lex) section like the following

(X: Notice the similarities with other questions)

▼ Slots ⓘ

Priority	Required	Name	Slot type	Version	Prompt	Settings
		e.g. Location	e.g. AMAZON...		e.g. What city?	+
1.	✓	crust	Crusts	1	What kind of crust would you	⚙️ ✖️
2.	✓	size	Sizes	1	What size pizza?	⚙️ ✖️
3.	✓	pizzaKind	PizzaKind	3	Do you want a veg or cheese	⚙️ ✖️

Tips: Modify the area highlighted above to develop your new ChatBot to meet the requirements of the Food Menu you intend to create

Answer

▼ Slots ⓘ

Priority	Required	Name	Slot type	Version	Prompt	Settings
		e.g. Location	e.g. AMAZON.US_CITY		e.g. What city?	+
1.	✓	patty	Patty	1	What type of patty would you like?	⚙️ ✖️
2.	✓	cheese	Cheese	1	Would you like to add cheese?	⚙️ ✖️
3.	✓	meal	Meal	1	What type of meal would you like?	⚙️ ✖️
4.	✓	drink	Drinks	1	What type of drink would you like?	⚙️ ✖️

Activity Sheet



Question 4

Provide the screenshot of your **new** ChatBot – TestBot (*In Amazon Lex*) like the following. The current **Sample Utterances** is configured as “hi”. Configure that to your name instead of using the default “hi” or “hello”.

A screenshot of a chatbot interface. It shows a sequence of messages and user selections. The chatbot starts with a grey bubble saying "hi". Then, a blue bubble asks "What kind of crust would you like?". Below this, two blue buttons labeled "Thin" and "Thin" are shown. Next, a blue bubble asks "What size pizza?". Below this, three blue buttons labeled "Small", "Medium", and "Large" are shown. Then, a blue bubble asks "Do you want a veg or cheese pizza?". Below this, two blue buttons labeled "Cheese" and "Vegetable" are shown. Finally, a blue bubble says "Okay, I have ordered your medium veg pizza on thin crust".

hi

What kind of crust would you like?

Thin

Thin

What size pizza?

Small

Medium

Large

Do you want a veg or cheese pizza?

Cheese

Vegetable

Okay, I have ordered your medium veg pizza on thin crust

Answer

Hi Hans!

What type of patty would you like?

Fish

Beef

Chicken

Would you like to add cheese?

Cheese

No Cheese

What type of meal would you like?

French Fries

Corn Cup

4 pc Nugget

What type of drink would you like?

Coke

Ice Lemon Tea

Milo

Okay, I have ordered your Chicken burger with Cheese meal. The meal includes French Fries and a Milo drink

Clear chat history