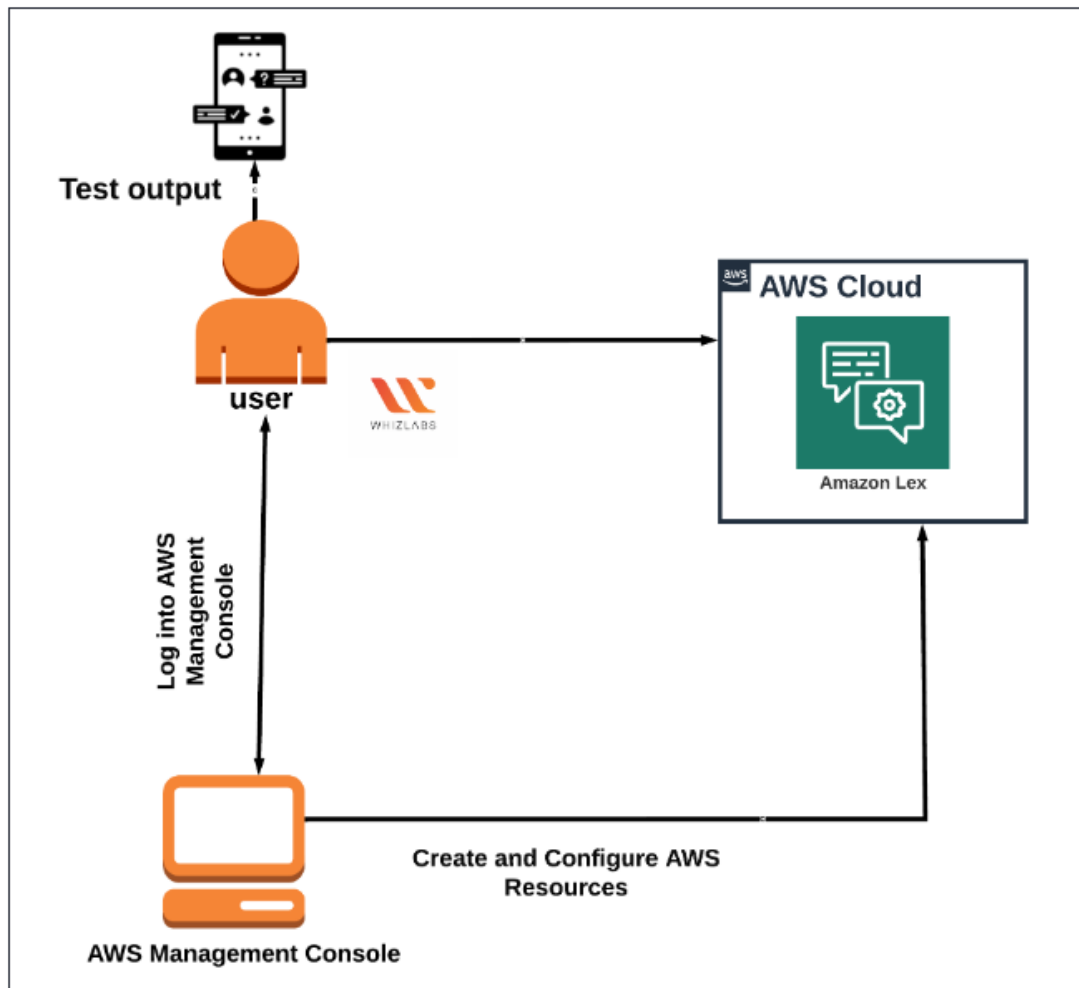


En esta práctica de laboratorio, aprenderemos a desarrollar y probar una aplicación de chatbox de muestra utilizando la consola Amazon Lex v2.

Nota: Amazon Lex es un servicio de AWS que se utiliza para crear interfaces conversacionales para aplicaciones que utilizan voz y texto.

Arquitectura:



**\* Crear un robot Lex**

Navegue a Amazon Lex en la consola de AWS.

1. Haga clic en crear bot y seleccione el botón de opción Crear un bot en blanco.

2. Ingrese un nombre de bot como PizzaOrder

The screenshot shows the AWS Lex console interface for creating a new bot. The breadcrumb navigation at the top indicates the path: Lex > Bots > Create bot. The left sidebar shows the progress: Step 1: Configure bot settings (active) and Step 2: Add languages. The main content area is titled 'Configure bot settings' and includes an 'Info' link. It is divided into two sections: 'Creation method' and 'Bot configuration'. In the 'Creation method' section, four options are presented: 'Descriptive Bot Builder - GenAI', 'Create a blank bot' (which is selected with a blue border and a blue radio button), 'Start with an example', and 'Start with transcripts'. The 'Bot configuration' section contains a 'Bot name' field with the value 'PizzaOrder' and a 'Description - optional' field with the value 'IT HelpDesk bot for employees in the North America office'.

En los permisos de IAM, seleccione la función preconfigurada existente como se muestra a continuación.

Asegúrese de seleccionar no para la pregunta COPPA como se muestra a continuación.

**IAM permissions** [Info](#)

IAM roles are used to access other services on your behalf.

Runtime role

Choose a role that defines permissions for your bot. To create a custom role, use the IAM console.

☐ Create a role with basic Amazon Lex permissions.

☒ Use an existing role.

Existing role

Choose an existing role to use with this Lex bot. The role must have permissions to upload logs to Amazon CloudWatch logs.

task\_10079\_Role-166569.28875037

▼

**Children's Online Privacy Protection Act (COPPA)** [Info](#)

Is use of your bot subject to the [Children's Online Privacy Protection Act \(COPPA\)](#) [?](#)

☐ Yes

☒ No

**Idle session timeout**

You can configure how long a session is maintained when the user does not provide any input and the session is idle. Amazon Lex retains context information until a session ends.

Session timeout

5

minute(s)

▼

By default, session duration is 5 minutes, but you can specify any duration between 1 and 1440 minutes (24 hours).

Agregar idioma al bot

Selecione Inglés (EE. UU.) en el menú desplegable Seleccionar idioma

Interacción de voz como Ninguna. Esta es sólo una aplicación basada en texto.

Lex > Bots > Create bot

Step 1  
Configure bot settings

Step 2  
**Add languages**

### Add language to bot [Info](#)

**▼ Language: English (US)**

Select language  
English (US) ▼

Description - optional  
  
Maximum 200 characters.

Voice interaction  
The text-to-speech voice that your bot uses to interact with users.  
None. This is only a text based application ▼

Intent classification confidence score threshold  
0.40  
Min: 0.00, max: 1.00.

Cancel Add another language Done

## \* Crear intenciones

Crea una intención llamada GetPizzaOrder

Amazon Lex

Back to intents list (2)

Search

Sort by last updated ▼

NewIntent Unsaved

FallbackIntent

Successfully created bot: PizzaOrder

Draft version ▼ English (US) Not built

### ▼ Intent details [Info](#)

Intent name  
GetPizzaOrder  
Maximum 100 characters. Valid characters: A-Z, a-z, 0-9, ~, \_

Intent and utterance generation description  
Describe the purpose of your intent. This will also be used when generating utterances for your intent.  
  
Maximum 200 characters.

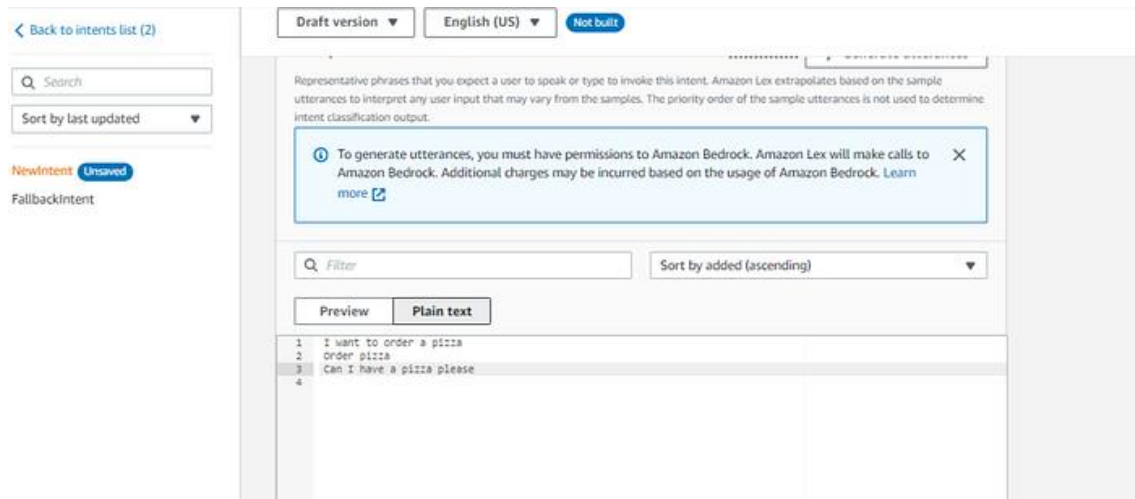
ID: DLCFNJOR93

### ▼ Contexts - optional [Info](#)

Input contexts  
Choose contexts ▼

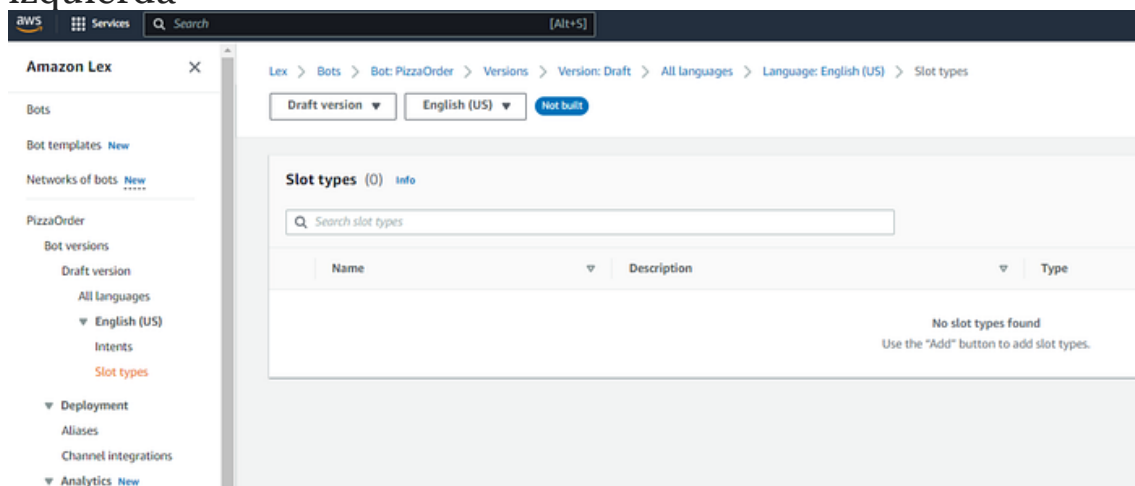
Output contexts  
Choose contexts ▼

En la opción Texto sin formato, ingrese el texto de entrada como se muestra en la captura de pantalla a continuación.

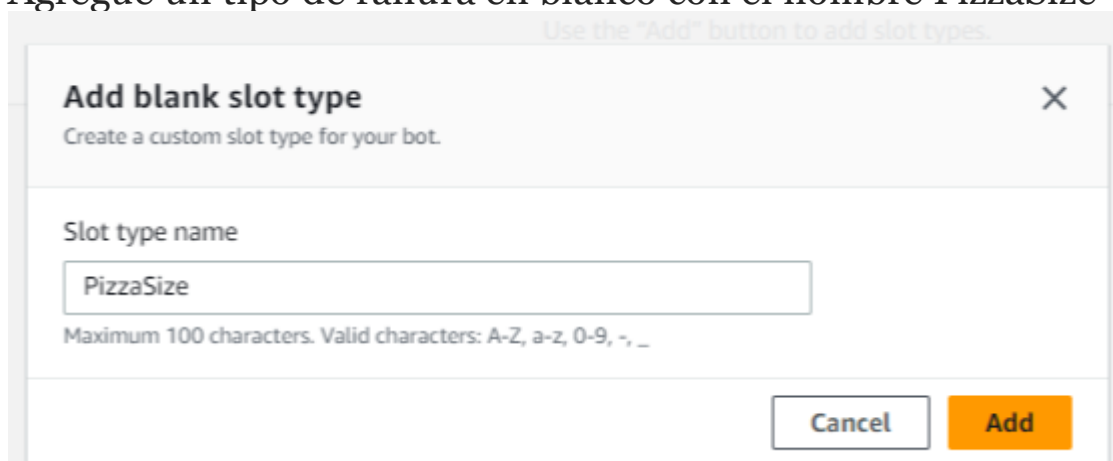


## \* Crear tipos de tragamonedas

Seleccione la opción Tipos de tragamonedas en PizzaOrder a la izquierda



Agregue un tipo de ranura en blanco con el nombre PizzaSize



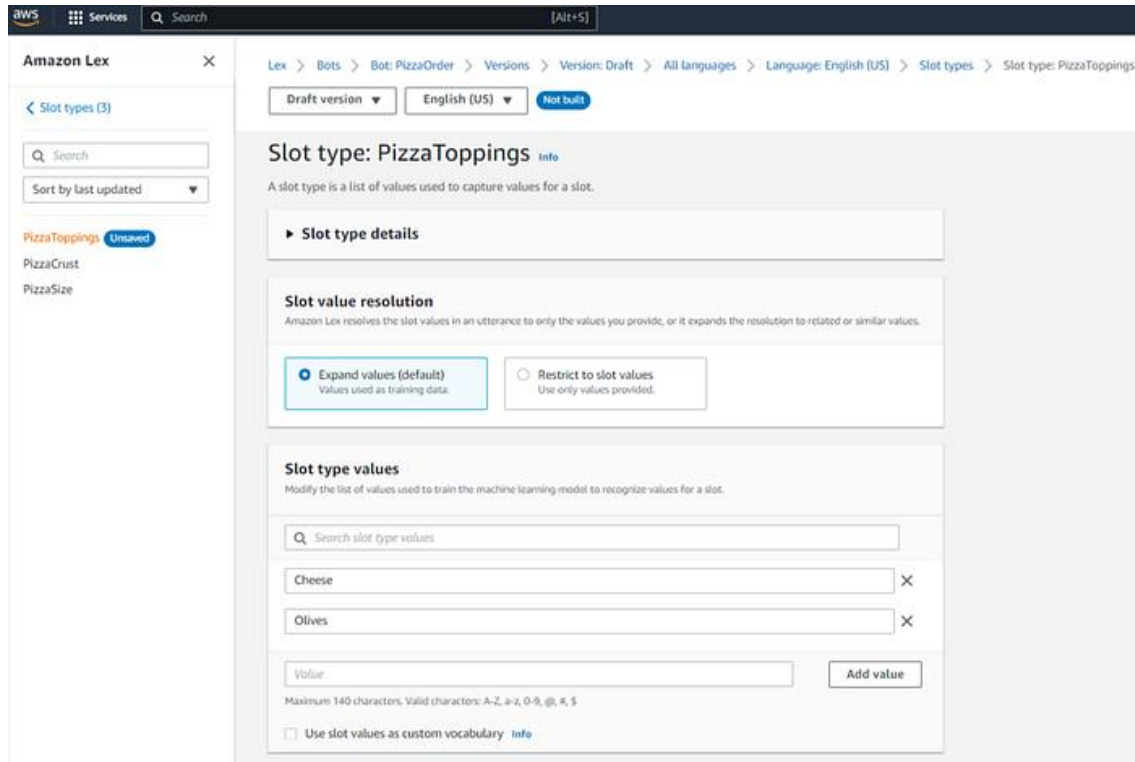
Seleccione el botón de radio junto a Restringir a valores de ranura e ingrese los diferentes valores de tipo de ranura como Pequeño, Mediano, Grande

The screenshot shows the Amazon Lex console interface for configuring a slot type. The breadcrumb trail is: Lex > Bots > Bot: PizzaOrder > Versions > Version: Draft > All languages > Language: English (US) > Slot types > Slot type: PizzaSize. The left sidebar shows 'Slot types (1)' with a search bar and a dropdown set to 'Sort by last updated'. Below this, 'PizzaSize' is listed with an 'Unsaved' status. The main content area is titled 'Slot type: PizzaSize' with an 'info' link. It includes a description: 'A slot type is a list of values used to capture values for a slot.' Below this is a 'Slot type details' section. The 'Slot value resolution' section has two radio buttons: 'Expand values (default)' (Values used as training data.) and 'Restrict to slot values' (Use only values provided.), with the latter being selected. The 'Slot type values' section has a description: 'Modify the list of values used to train the machine learning model to recognize values for a slot.' It features a search bar, a list of existing values (Small, Medium, Large) each with a 'Tab or ; or enter return for new value' input and a delete 'X' button, and an 'Add value' button at the bottom. A note states: 'Maximum 140 characters. Valid characters: A-Z, a-z, 0-9, @, #, \$'. At the bottom, there is an unchecked checkbox for 'Use slot values as custom vocabulary' with an 'info' link.

Cree otro tipo de ranura llamado PizzaCrust con valores de tipo de ranura como Thin Crust y Hand tossed.

The screenshot shows the Amazon Lex console interface for configuring a slot type. The breadcrumb trail is: Lex > Bots > Bot: PizzaOrder > Versions > Version: Draft > All languages > Language: English (US) > Slot types > Slot type: PizzaCrust. The left sidebar shows 'Slot types (2)' with a search bar and a dropdown set to 'Sort by last updated'. Below this, 'PizzaCrust' and 'PizzaSize' are listed, with 'PizzaCrust' having an 'Unsaved' status. The main content area is titled 'Slot type: PizzaCrust' with an 'info' link. It includes a description: 'A slot type is a list of values used to capture values for a slot.' Below this is a 'Slot type details' section. The 'Slot value resolution' section has two radio buttons: 'Expand values (default)' (Values used as training data.) and 'Restrict to slot values' (Use only values provided.), with the latter being selected. The 'Slot type values' section has a description: 'Modify the list of values used to train the machine learning model to recognize values for a slot.' It features a search bar, a list of existing values (Thin Crust, Hand Tossed) each with a 'Tab or ; or enter return for new value' input and a delete 'X' button, and an 'Add value' button at the bottom. A note states: 'Maximum 140 characters. Valid characters: A-Z, a-z, 0-9, @, #, \$'. At the bottom, there is an unchecked checkbox for 'Use slot values as custom vocabulary' with an 'info' link.

Repita el mismo paso y cree otro tipo de ranura como PizzaToppings con valores de tipo de ranura como Queso y Aceitunas.



## \* Agregar espacios para bots

Navegue hasta GetPizzaOrder y haga clic en el botón Agregar ranura debajo de Ranuras, como se muestra a continuación.

The screenshot shows the Amazon Lex console interface. On the left, there's a sidebar with 'Amazon Lex' and a search bar. The main area displays the configuration for an intent named 'GetPizzaOrder'. At the top, there are tabs for 'Draft version' and 'English (US)'. Below this, there's a section for 'Initial response' with a text area for the message and an 'Add utterance' button. Further down, there's a section for 'Slots (0) - optional' with a filter bar and an 'Add slot' button. The interface is clean and modern, with a dark header bar at the top.

Ingrese el nombre como Tamaño de pizza y seleccione Tipo de ranura como Tamaño de pizza con mensajes como ¿Qué tamaño? y haga clic en el botón Agregar

The screenshot shows the 'Add slot' dialog box. It has a title bar with 'Add slot' and a close button. Below the title, there's a checkbox labeled 'Required for this intent' which is checked. Underneath, there's a text area for the 'Name' with the value 'PizzaSize'. To the right, there's a dropdown menu for 'Slot type' with the value 'PizzaSize'. Below these, there's a text area for 'Prompts' with the value 'What size?'. At the bottom right, there are two buttons: 'Cancel' and 'Add'.

Repita los mismos pasos nuevamente como se muestra a continuación.



Ingrese el nombre como PizzaToppings y seleccione el tipo de ranura como PizzaToppings con indicaciones para que pueda seleccionar un ingrediente opcional. ¿Qué le gustaría? y haga clic en el botón Agregar

**Add slot** ×  
A slot is used to capture information from the user to fulfill the intent.

☒ **Required for this intent**  
The bot will prompt for this slot during the conversation if a value is not provided by the user.

**Name**

**Slot type**  

PizzaToppings ▼

**Prompts**

Cancel

Add

Ingrese el nombre como PizzaCrust y seleccione el tipo de ranura como PizzaCrust con el mensaje ¿Qué tipo de corteza desea? y haga clic en el botón Agregar

**Add slot** ×  
A slot is used to capture information from the user to fulfill the intent.

☒ **Required for this intent**  
The bot will prompt for this slot during the conversation if a value is not provided by the user.

**Name**

**Slot type**  

PizzaCrust ▼

**Prompts**

Cancel

Add

En Cumplimiento -> En cumplimiento exitoso, ingrese “Muy bien. Tengo su pedido de una pizza {PizzaSize} con una base de {PizzaCrust} y un aderezo opcional de {PizzaToppings}”.

**Confirmation** Info Active  
Prompts help to clarify whether the user wants to fulfill the intent or cancel it.

► Prompts to confirm the intent  
Message: -

Responses sent when the user declines the intent  
Message: -

**Fulfillment** Info Active  
Run a lambda function to fulfill the intent and inform users of the status when it's complete.

▼ On successful fulfillment  
Message: Alright. I have your order for a {PizzaSize} pi...

In case of failure  
Message: -

On successful fulfillment  
Alright. I have your order for a {PizzaSize} pizza with a {PizzaCrust} crust and an optional {PizzaToppings} topping.

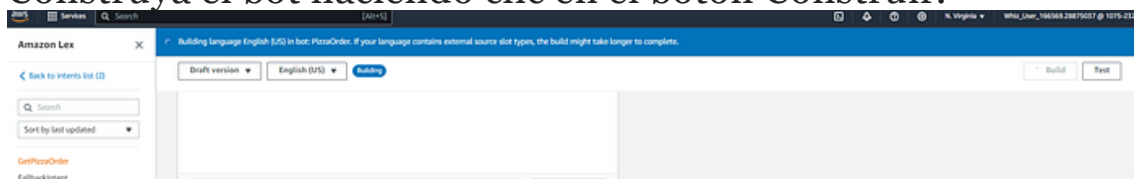
In case of failure  
Something went wrong

Advanced options  
Configure success, failure, and timeout responses.

Guardar la intención

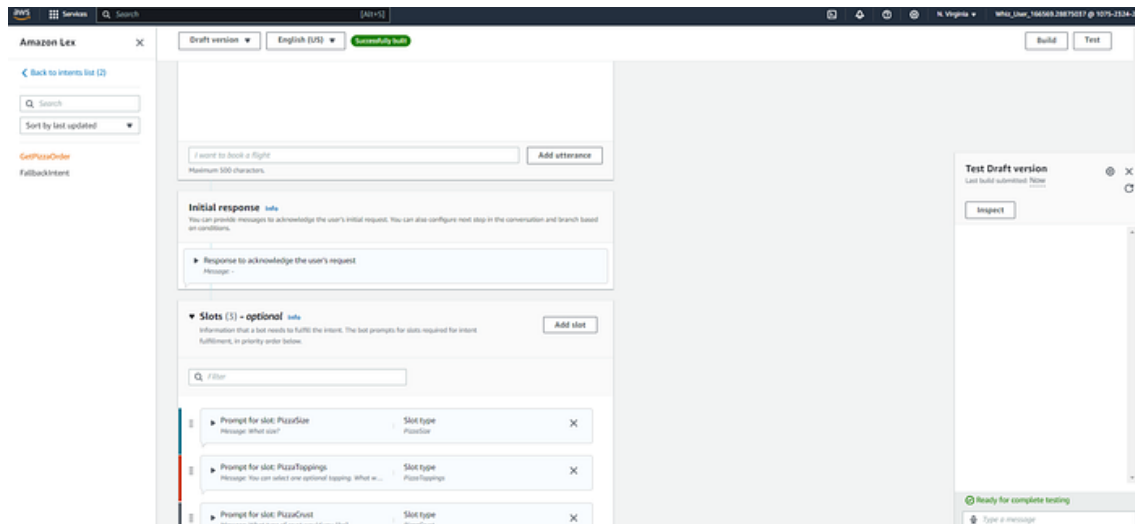
## \* Construye y prueba el tipo de Bot.

Construya el bot haciendo clic en el botón Construir.

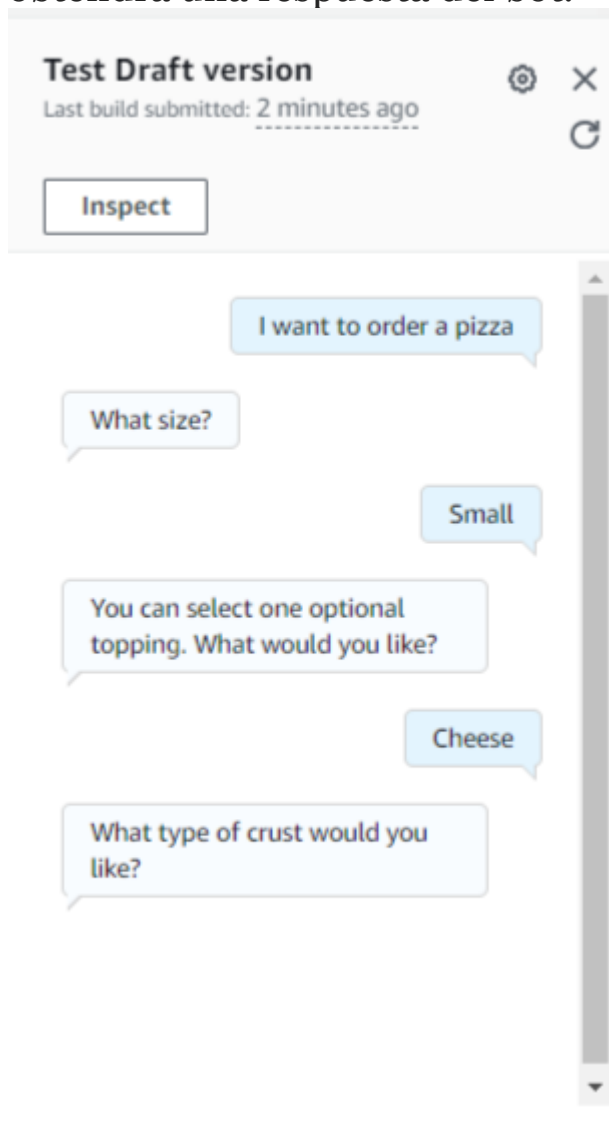


Una vez construido con éxito, es el momento de probar el bot.

Haga clic en el botón Probar, esto abrirá una ventana de chat en la parte inferior derecha.



Ingresa la entrada al bot como se muestra a continuación y obtendrá una respuesta del bot.



¡Finalmente hemos construido y probado con éxito un chatbot de muestra que toma pedidos de pizza!