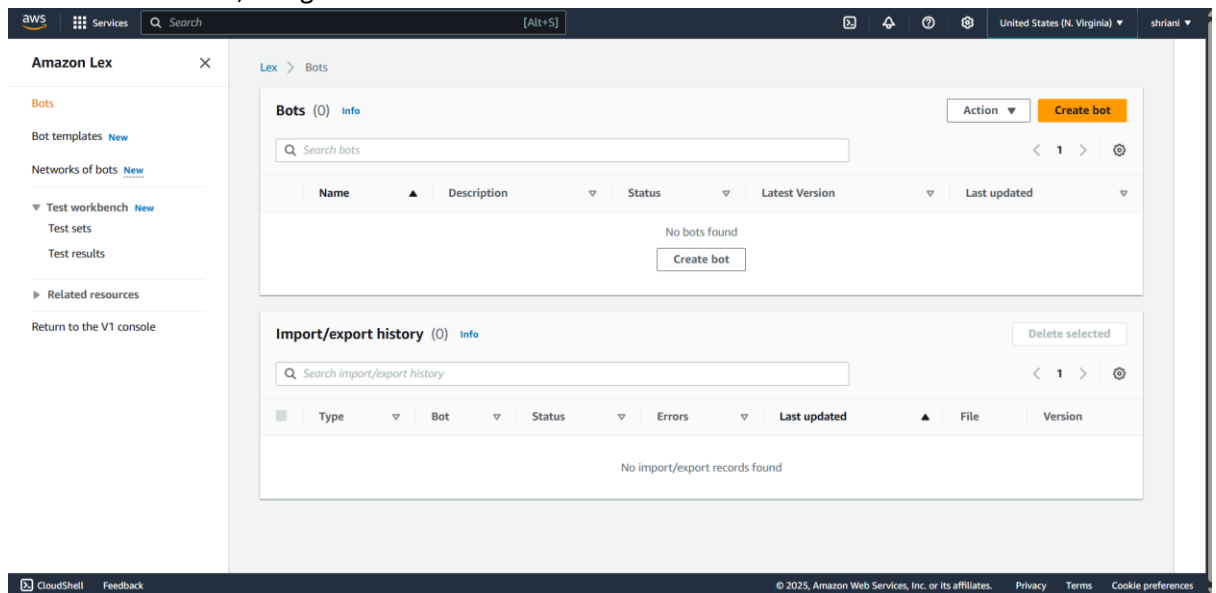


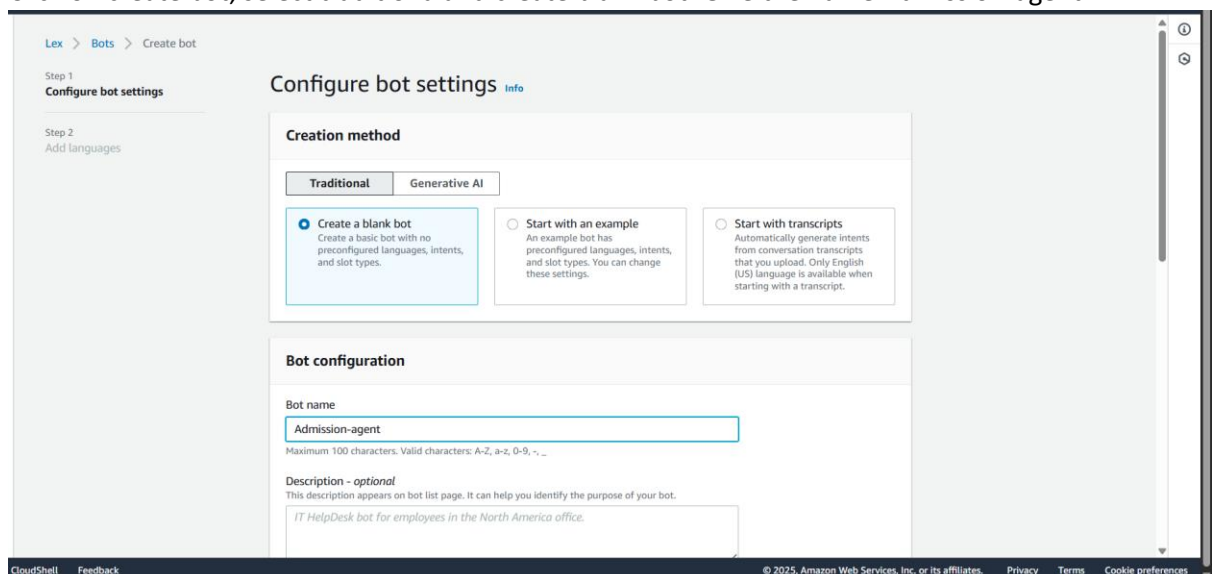
AMAZON LEX

Amazon Lex is a cloud-based service from Amazon Web Services (AWS) that enables developers to build conversational interfaces—such as chatbots and voice assistants—for applications using both voice and text input. It uses the same advanced natural language understanding (NLU) and automatic speech recognition (ASR) technologies.

- In the AWS console, navigate to the Amazon Lex service



- Click on create bot, select traditional and create blank bot. Give the name Admission-agent



- Choose to Create a role with basic Amazon lex permission and create bot

Maximum 2000 characters.

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.

ⓘ Creating a role takes a few minutes. Don't delete the role or edit the trust or permissions policies in this role until we've finished creating it.

New role

Amazon Lex creates a runtime role with permission to upload to Amazon CloudWatch Logs.

`AWSServiceRoleForLexV2Bots_X35NDWZZX5`

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

- Keep all the features default

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 2000 characters.

Voice interaction

The text-to-speech voice that your bot uses to interact with users.

Danielle ▼

Voice sample

Hello, my name is Danielle. Let me know how I can assist you. Play

Intent classification confidence score threshold

0.40

Min: 0.00, max: 1.00.

CloudShell Feedback

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➤ Now create an intent, name Admission-inquiry

Successfully created bot: Admission-agent

Draft version

English (US)

Not built

English (US) has not built changes.

Build

Test

▼ Intent details

Info

Intent name

Admission-Inquiry

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 2000 characters.

ID: WOFWVZZDVW

▼ Contexts - optional

Info

Input contexts

Choose contexts

Editor

Visual builder

New

Save intent

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➤ Create new Utterances

< Back to intents list (2)

Search

Sort by last updated

NewIntent Unsaved

FallbackIntent

Draft version

English (US)

Not built

English (US) has not built changes.

Build

Test

Filter

Sort by added (ascending)

Preview

Plain text

I want to apply for admission

what are the requirements for admissions

how can i get into [University Name]?

what is the deadline for application

where can i apply for admission

want to book a flight

Maximum 500 characters.

Add utterance

Editor

Visual builder

New

Save intent

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- Add slots for model responses, for city

The screenshot shows the 'Add slot' dialog box in the Amazon Lex console. The dialog has a title bar with a close button (X). Below the title bar, it says 'Add slot' and 'A slot is used to capture information from the user to fulfill the intent.' There is a checkbox labeled 'Required for this intent' which is checked. Below this, it says 'The bot will prompt for this slot during the conversation if a value is not provided by the user.' There are two input fields: 'Name' with the value 'City' and 'Slot type' with a dropdown menu showing 'AMAZON.City'. There is a 'Prompts' section with a text area. At the bottom right, there are 'Cancel' and 'Add' buttons. The background shows a blurred view of the console interface with sections like 'Response to acknowledge the user's request', 'Slots (0) - optional', 'Confirmation', 'Prompts to confirm', and 'Fulfillment'.

- Create a custom slot for program level

The screenshot shows the 'Slot type: ProgramLevel' configuration page in the Amazon Lex console. The page has a title 'Slot type: ProgramLevel' with an 'Info' link. Below the title, it says 'A slot type is a list of values used to capture values for a slot.' There is a section titled 'Slot type details' with a dropdown arrow. Inside this section, there is a 'Slot type name' field with the value 'ProgramLevel' and a note 'Maximum 100 characters. Valid characters: A-Z, a-z, 0-9, -, _'. There is a 'Description - optional' field with a text area and a note 'Helps you identify a slot type on the list' and 'Maximum 2000 characters.' There is a 'Type' field with the value 'Custom' and an 'ID' field with the value 'JGVB1CFFQ'. At the bottom right, there is a 'Save Slot type' button.

➤ Add slot type values

Amazon Lex resolves the slot values in an utterance to only the values you provide, or it expands the resolution to related or similar values.

☒ Expand values (default)
Values used as training data.

☐ Restrict to slot values
Use only values provided.

Slot type values

Modify the list of values used to train the machine learning model to recognize values for a slot.

Q Search slot type values

Undergrad X

Postgrad X

PHD X

Value Add value

Maximum 140 characters. Valid characters: A-Z, a-z, 0-9, @, #, \$

☐ Use slot values as custom vocabulary [Info](#)

Save Slot type

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➤ Next do the same for course

types (1) [Info](#)

Search slot types

| Name |
|--------------|
| ProgramLevel |

Add blank slot type

Create a custom slot type for your bot.

Slot type name

Course

Maximum 100 characters. Valid characters: A-Z, a-z, 0-9, -, _

Cancel Add

▼ Slot type details

Slot type name

Course

Maximum 100 characters. Valid characters: A-Z, a-z, 0-9, -, _

Description - optional

Helps you identify a slot type on the list

Maximum 2000 characters.

Type: Custom

ID: HPF4RW0IXI

Slot value resolution

Amazon Lex resolves the slot values in an utterance to only the values you provide, or it expands the resolution to related or similar values.

☒ Expand values (default)
Values used as training data.

☐ Restrict to slot values
Use only values provided.

Save Slot type

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Privacy

Terms

Cookie preferences

➤ Give slot type values

Amazon Lex

Draft version

English (US)

Not built

English (US) has not built changes.

Build

Test

< Slot types (2)

Search

Sort by last updated

Course Unsaved

ProgramLevel

Slot type values

Modify the list of values used to train the machine learning model to recognize values for a slot.

Search slot type values

CSE

IT

ECE

EEE

CSM

Value

Add value

Maximum 140 characters. Valid characters: A-Z, a-z, 0-9, @, #, \$

☐ Use slot values as custom vocabulary [Info](#)

Save Slot type

➤ Add those slots in the slots of the Admission-inquiry

Q Filter

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

ProgramLevel

Slot type

ProgramLevel ▼

Prompts

what level of study are you interested in?

Cancel

Add

Confirmation
Prompts help to clarify

Prompts to confirm
Message: -

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

On successful fulfillment
Message: -

In case of failure
Message: -

Editor Visual builder New

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

Course

Slot type

Course ▼

Prompts

Which course are you interested in?

Cancel

Add

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

Active

Successful fulfillment
In case of failure

- Now to go advance options and go to slot prompts an click on add -> add card group

The screenshot shows the 'Slot prompts' editor in the Amazon Lex console. At the top, there's a section for 'Advanced retry settings'. Below it, the 'Slot prompts' section is active, showing a 'Preview' tab. A dropdown menu is open from the 'Add' button, with options: 'Add text message group', 'Add card group' (highlighted), 'Add custom payload', and 'Add SSML language'. Below the menu, a 'Message group' is defined with the message 'Which course are you interested in?'. At the bottom, there are 'Cancel' and 'Update prompts' buttons.

- Create the buttons and click on update prompts

This screenshot shows the 'Slot prompts editor' for the 'course' slot. It includes a search bar and filters on the left. The main editor shows a 'Prompt for slot: Course' with the message 'Which course are you interested in?'. Below this, the 'Buttons - optional' section is expanded, showing three buttons: 'CSE', 'IT', and 'ECE'. Each button has a title and a value field. At the bottom, there are 'Cancel' and 'Update prompts' buttons.

➤ Create another intent

Intents (2) Info

An intent represents an action that the user wants to perform.

Search intents

| Name |
|-------------------|
| Admission-Inquiry |
| FallbackIntent |

Add empty intent

Create a custom intent for your bot.

Intent name

Maximum 100 characters. Valid characters: A-Z, a-z, 0-9, -, _

Cancel Add

➤ Add utterances

Amazon Lex

Draft version English (US) Not built

English (US) has not built changes. Build Test

Back to intents list (3)

Search

Sort by last updated

ScheduleConsultation Unsaved

Admission-Inquiry

FallbackIntent

Preview Plain text

Book a meeting with the agent

Schedule call with the team

I want to talk to the admission advisor

I want to book a flight

Maximum 500 characters.

Add utterance

Initial response info

You can provide messages to acknowledge the user's initial request. You can also configure next step in the conversation and branch based on conditions.

Editor Visual builder New

Save intent

CloudShell Feedback

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➤ Create a slot

Slots (0) - optional [Info](#)

information that a bot needs to fulfill the intent. The bot prompts for slots required for intent fulfillment, in priority order below.

[Add slot](#)

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

Prompts

Cancel

Add

Confirmation [Info](#)
Prompts help to clarify whether the user wants to fulfill the intent or cancel it.

Prompts to confirm the intent
Message: -

On successful fulfillment [Info](#)
You can define the response when closing the intent.

Message: -

Declining response [Info](#)
You can define the response when declining the intent.

Message: -

[Active](#)

➤ Add a confirmation prompt

Amazon Lex ×

[Draft version](#) [English \(US\)](#) [Not built](#) [English \(US\) has not built changes.](#) [Build](#) [Test](#)

[Back to intents list \(3\)](#)

[Sort by last updated](#)

[ScheduleConsultation](#) [Unsaved](#)

[Admission-Inquiry](#)

[FallbackIntent](#)

Confirmation [Info](#) [Active](#)

Prompts help to clarify whether the user wants to fulfill the intent or cancel it.

Prompts to confirm the intent
Message: Do you want to meet the agent on {PreferredDate} at {PreferredTime}?

Responses sent when the user declines the intent
Message: Okay, the process is terminated

Confirmation prompt
What will the bot say to prompt the user to confirm this intent.

Decline response
What will the bot say if the user says NO to the confirmation prompt.

[Advanced options](#)
Configure confirmation prompts and decline responses.

Fulfillment [Info](#) [Active](#)

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

On successful fulfillment

In case of failure

[Editor](#) [Visual builder](#) [New](#)

[Save intent](#)

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➤ Add a fulfilment prompt

The screenshot shows the Amazon Lex console interface. On the left, there's a sidebar with a search bar and a list of intents: **ScheduleConsultation** (marked as 'Unsaved'), **Admission-Inquiry**, and **FallbackIntent**. The main area displays the configuration for the **ScheduleConsultation** intent. At the top, it says 'Draft version', 'English (US)', and 'Not built'. There are 'Build' and 'Test' buttons. The 'Fulfillment' section is active, showing two prompts: 'On successful fulfillment' with the message 'Your meeting has been scheduled on {PreferredDate} at {PreferredTime}' and 'In case of failure' with the message 'Sorry, we couldnt book the meeting. Please contact our team.' Below these is an 'Advanced options' button. The 'Closing response' section is also active, showing a message 'Response sent to the user after the intent is fulfilled'. At the bottom, there are buttons for 'Editor', 'Visual builder', and 'New', along with a 'Save intent' button.

➤ Create a new intent to apply for admission

The screenshot shows the 'Add empty intent' dialog box in the Amazon Lex console. The dialog has a title 'Add empty intent' and a subtitle 'Create a custom intent for your bot.' It contains a text input field for 'Intent name' with the value 'ApplyForAdmission'. Below the input field, it says 'Maximum 100 characters. Valid characters: A-Z, a-z, 0-9, -, _'. There are 'Cancel' and 'Add' buttons at the bottom right. In the background, a list of intents is visible, including 'Admission-Inquiry', 'ScheduleConsultation', and 'FallbackIntent'.

➤ Add utterances

The screenshot shows the Amazon Lex console interface for adding utterances to an intent. The top navigation bar includes the AWS logo, 'Services', a search bar, a language dropdown set to 'English (US)', and a 'Not built' status. The main header area contains 'Draft version', 'English (US)', 'Not built', and a notification that 'English (US) has not built changes.' with 'Build' and 'Test' buttons. The left sidebar, titled 'Amazon Lex', features a 'Back to intents list (4)' link, a search bar, a 'Sort by last updated' dropdown, and a list of intents: 'ApplyForAdmission' (marked 'Unsaved'), 'Admission-Inquiry', 'ScheduleConsultation', and 'FallbackIntent'. The main content area is divided into two sections. The top section, 'Utterances', displays a list of three existing utterances: 'How can i apply', 'help me start an application', and 'i want to enroll in a university'. Below this is a text input field containing 'i want to book a flight' with an 'Add utterance' button and a note 'Maximum 500 characters.' The bottom section, 'Initial response', includes an 'info' icon and explanatory text: 'You can provide messages to acknowledge the user's initial request. You can also configure next step in the conversation and branch based on conditions.' It features a dropdown menu labeled 'Response to acknowledge the user's request' with 'Message: ~' below it. At the bottom, there are tabs for 'Editor' (active), 'Visual builder', and 'New', along with a 'Save intent' button.

Amazon Lex

Back to intents list (4)

Search

Sort by last updated

ApplyForAdmission **Unsaved**

Admission-Inquiry

ScheduleConsultation

FallbackIntent

Draft version English (US) **Not built**

English (US) has not built changes. Build Test

How can i apply

help me start an application

i want to enroll in a university

i want to book a flight Add utterance

Maximum 500 characters.

Initial response info

You can provide messages to acknowledge the user's initial request. You can also configure next step in the conversation and branch based on conditions.

► Response to acknowledge the user's request

Message: ~

Editor Visual builder New

Save intent

Test Draft version

Last build submitted: 1 minute ago



Inspect

help me staart an application

Your full name?

Manogna vada

Your E-mail address

man2g.com

Your E-mail address

✓ Ready for complete testing



Type a message

Save intent

Test Draft version

Last build submitted: 1 minute ago



Inspect

Course

CSE

CSM

IT

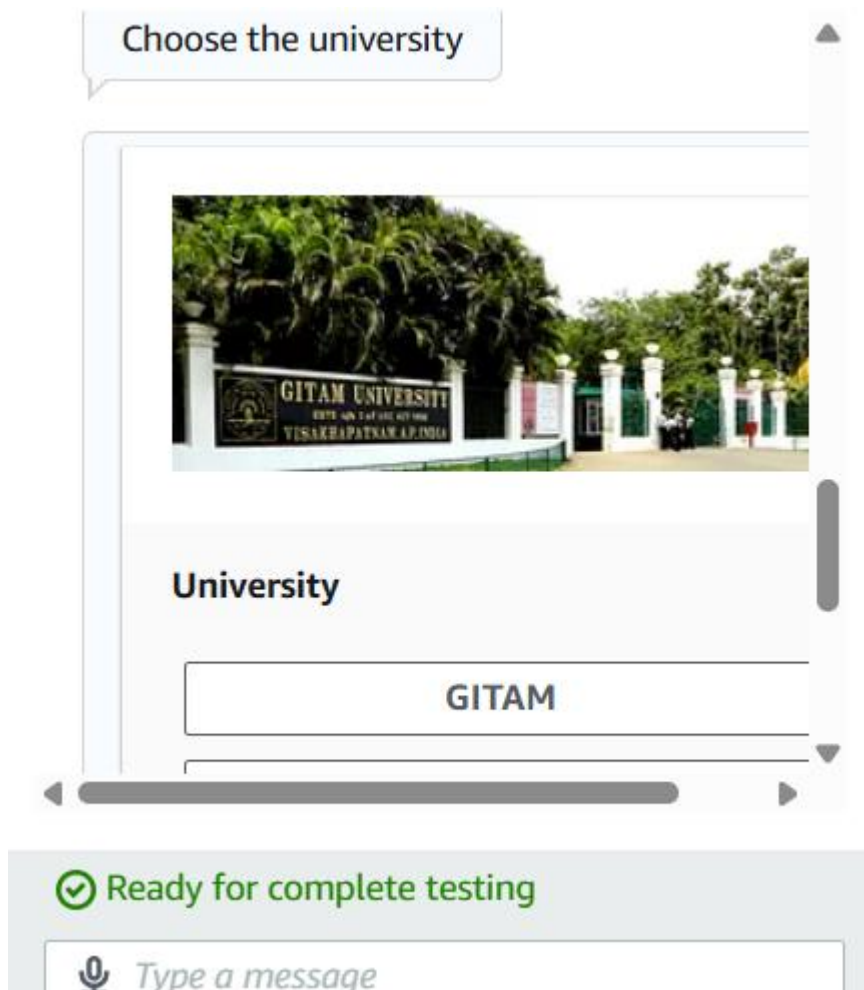
CSE

Choose the universitv

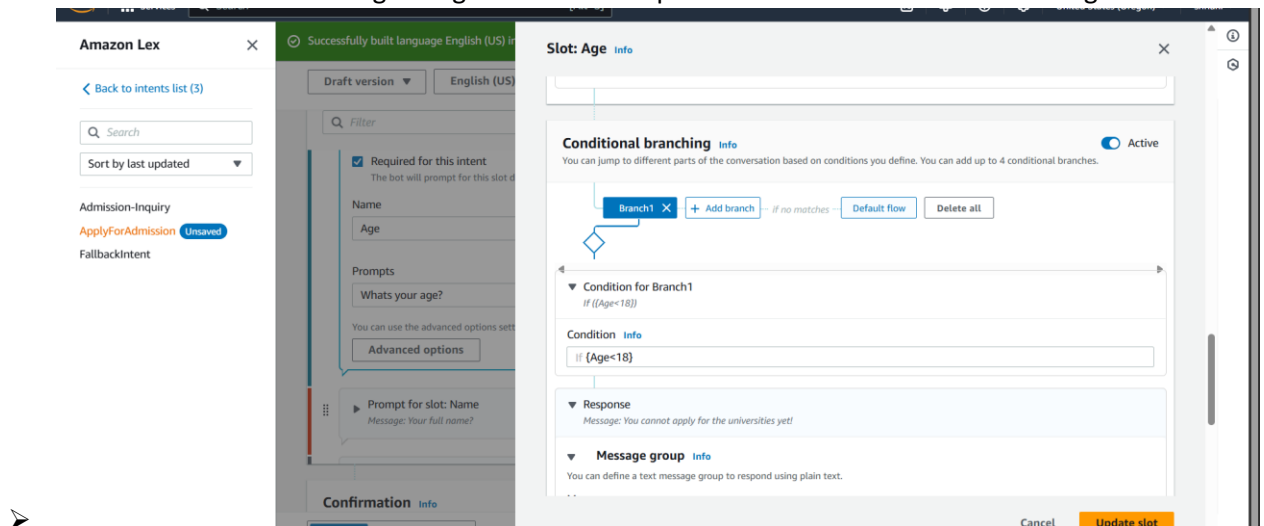
✓ Ready for complete testing



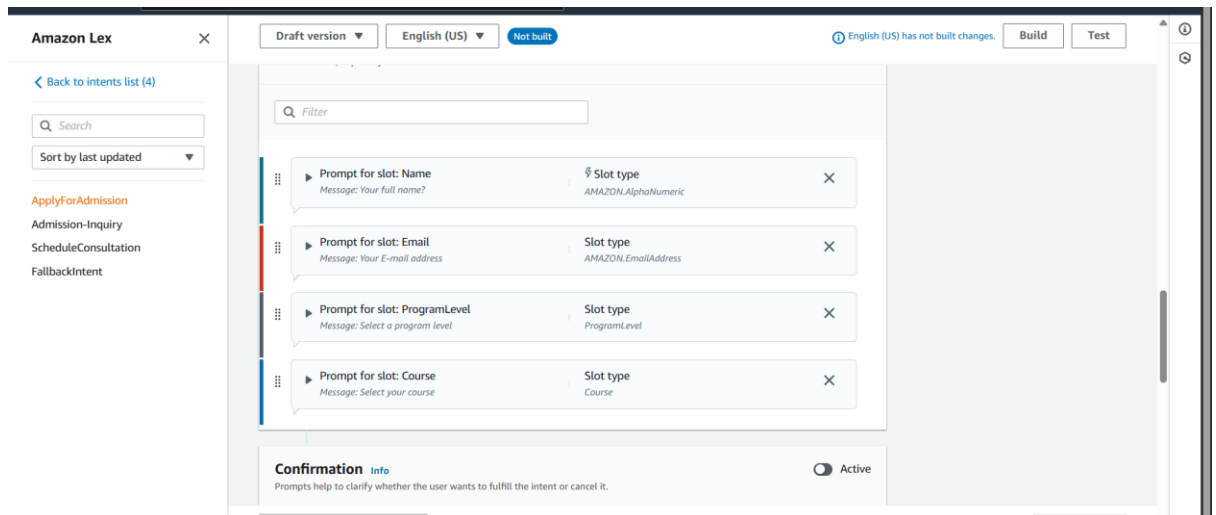
Type a message



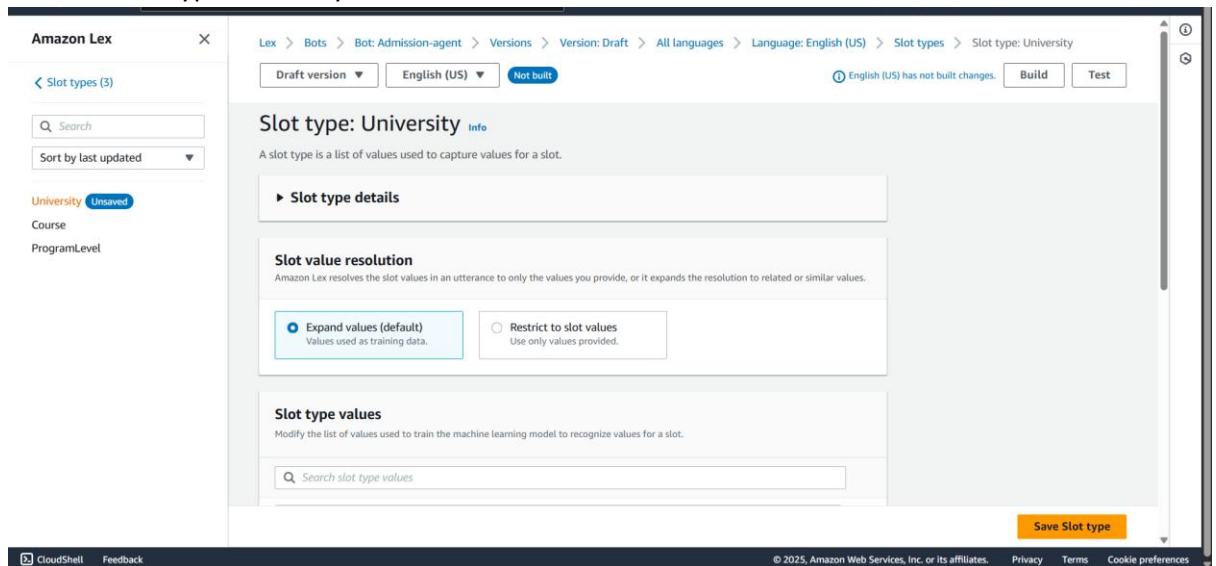
- Create a new slot named age and go to advanced options and add conditional branching



- Add slots



➤ Create a slot type university



➤ Add the values

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 is titled 'Slot type values' and contains a search bar, a list of values (GITAM, JNTU, OU, IIIT), and an 'Add value' button. The values are displayed in a list with 'x' icons to remove them. At the bottom, there's a 'Save Slot type' button.

➤ Create a S3 bucket and add the university images and enable public access

The screenshot shows the Amazon S3 console interface. It displays a table of objects in a bucket. The table has columns for Name, Type, Last modified, Size, and Storage class. Three objects are listed: gitam.webp, jntu.webp, and ou.webp.

| Name | Type | Last modified | Size | Storage class |
|------------|------|-------------------------------------|---------|---------------|
| gitam.webp | webp | June 19, 2025, 11:41:04 (UTC+05:30) | 9.5 KB | Standard |
| jntu.webp | webp | June 19, 2025, 11:41:05 (UTC+05:30) | 33.9 KB | Standard |
| ou.webp | webp | June 19, 2025, 11:41:07 (UTC+05:30) | 58.9 KB | Standard |

➤ Add the university slot and add a card group , add the image url from s3 bucket

The screenshot shows the Amazon Lex console interface for configuring a response card group. It includes fields for 'Image URL' (https://s3w-bucket.s3.us-west-2.amazonaws.com/gitam.webp), 'Title' (University), and 'Subtitle'. There's also a section for 'Buttons - optional' with a table for 'Button 1 title' and 'Button 1 value'.

| Button 1 title | Button 1 value |
|----------------|----------------|
| GITAM | GITAM |

➤ Add confirmation prompt

Confirmation [Info](#)

Prompts help to clarify whether the user wants to fulfill the intent or cancel it.

☒ Active

▼ Prompts to confirm the intent

Message: Do you want to go ahead with your applicati...

Responses sent when the user declines the intent

Message: Your request will be terminated

Confirmation prompt

What will the bot say to prompt the user to confirm this intent.

Decline response

What will the bot say if the user says NO to the confirmation prompt.

Advanced options

Configure confirmation prompts and decline responses.

➤ Add fulfillment prompt

Fulfillment [Info](#)

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

☒ Active

▼ On successful fulfillment

Message: Your application has been sent successfully

In case of failure

Message: Something went wrong

On successful fulfillment

In case of failure

Advanced options

Configure success, failure, and timeout responses.

Closing response [Info](#)

You can define the response when closing the intent.

☐ Active

➤ Build the bot

The screenshot shows the Amazon Lex console interface. On the left, there's a sidebar with 'Amazon Lex' and a list of intents: 'ApplyForAdmission', 'Admission-Inquiry' (highlighted in orange), and 'FallbackIntent'. The main area displays the configuration for the 'Admission-Inquiry' intent. It includes a breadcrumb trail: 'Lex > Bots > Bot: Admission-... > Versions > Version: DRAFT > All languages > Language: English (US) > Intents > Intent: Admission-...'. There are tabs for 'Draft version', 'English (US)', and 'Successfully built'. The 'Intent details' section shows the 'Intent name' as 'Admission-Inquiry' and a description: 'An intent represents an action that fulfills a user's request. Intents can have arguments called slots that represent variable information.' Below this is a 'Conversation flow' section. On the right, there's a 'Test Draft version' panel with a 'Last build submitted: Now' and an 'Inspect' button. At the bottom of the main area, there are tabs for 'Editor', 'Visual builder', and 'New'. A 'Save intent' button is also visible.

The screenshot shows a 'Test Draft version' dialog box. At the top, it says 'Test Draft version' and 'Last build submitted: Now'. There's an 'Inspect' button. Below this, a conversation flow is shown with speech bubbles. The first bubble says 'help me start an application'. The second bubble says 'Whats your age?'. The third bubble says '17'. The fourth bubble says 'You cannot apply for the universities yet!'. At the bottom of the dialog, there's a green checkmark icon and the text 'Ready for complete testing'. Below this, there's a microphone icon and the text 'Type a message'.

➤ OUTPUT