

Lab 11 - Amazon LEX

Creating a bot from Lex Dashboard

https://us-east-1.console.aws.amazon.com/lexv2/home?region=us-east-1#createBot

Amazon Lex

Lex > Bots > Create bot

Step 1: Configure bot settings

Step 2: Add languages

Configure bot settings

Creation method

☒ Traditional ☐ Generative AI

☒ Create a blank bot
Create a blank bot with no preconfigured languages, intents and slot types.

☐ Start with an example
An example bot has preconfigured languages, intents and slot types. You can change these settings.

☐ Start with transcripts
Automatically generate intents from conversation transcripts that you upload. Only English (US) language is available when starting with a transcript.

Bot configuration

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

Description - optional
This description appears on bot list page. It can help you identify the purpose of your bot.
IT Helpdesk bot for employees in the North America office.
Maximum 200 characters.

IAM permissions

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.

https://us-east-1.console.aws.amazon.com/lexv2/home?region=us-east-1#createBot

Amazon Lex

Lex > Bots > Create bot

Step 1: Configure bot settings

Step 2: Add languages

Add language to bot

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.
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.

Cancel Add another language Done

Creating an intent “BookTrain”

Amazon Lex

Lex > Bots > Bot: TravelBook... > Versions > Version: DRAFT > All languages > Language: English (US) > Intents > Intent: BookTrain

Intent: BookTrain

Intent details

Intent name: BookTrain

Intent and utterance generation description: Train ticket booking

ID: DFDZ8POQQ1

Save intent

Adding slots for the intent (3 built-in and 1 custom slot type)

Slots (4) - optional

Filter

Prompt for slot: Departure

Prompt for slot: Destination

Prompt for slot: Date

Prompt for slot: BerthType

Save intent

Creating custom slot type “BerthType”.

Slot type: BerthType

Slot value resolution

Expand values (default)

Slot type values

Lower

Upper

Middle

Save intent

Sample utterances for the intent.

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 'Sample utterances (5)' for an intent named 'BookTrain'. A notification states: 'To generate utterances, you must have permissions to Amazon Bedrock. Amazon Lex will make calls to Amazon Bedrock. Additional charges may be incurred based on the usage of Amazon Bedrock. Learn more'. Below this, there's a list of sample utterances: 'I want to book a train', 'Book me a train', 'Schedule a train to [Destination] from [Departure]', 'Book a train for [Date]', and 'Book a [BerthType] berth in the train'. The interface includes tabs for 'Editor' and 'Visual builder', and a 'Save intent' button at the bottom right.

Adding a confirmation prompt

The screenshot shows the Amazon Lex console interface with the 'Confirmation' section expanded. It includes a 'Prompt for slot: BerthType' with the message 'Which berth do you want?'. The 'Confirmation' section is active and contains a 'Prompts to confirm the intent' section with a message 'Do you want to confirm your train from [Departure] to [Destination] on [Date]?'. Below this is a 'Decline response' section with a message 'Okay. No ticket has been booked.' and an 'Advanced options' button. The 'Fulfilment' section is also active, showing a message 'Your train from [Departure] to [Destination] on [Date] has been booked.' and an 'Advanced options' button. The interface includes tabs for 'Editor' and 'Visual builder', and a 'Save intent' button at the bottom right.

Adding a fulfilment message

The screenshot shows the Amazon Lex console interface with the 'Fulfilment' section expanded. It includes a 'On successful fulfilment' section with a message 'Your train from [Departure] to [Destination] on [Date] has been booked.' and an 'In case of failure' section with a message 'Something went wrong'. Below this is a 'Closing response' section with a message 'Response sent to the user after the intent is fulfilled'. The interface includes tabs for 'Editor' and 'Visual builder', and a 'Save intent' button at the bottom right.

Similarly, creating another intent “BookHotel”

The screenshot shows the Amazon Lex console interface for configuring an intent named 'BookHotel'. The breadcrumb navigation is: Lex > Bots > Bot: TravelBooking > Versions > Version: Draft > All languages > Language: English (US) > Intents > Intent: BookHotel. The page has tabs for 'Draft version', 'English (US)', and 'Not built'. A notification states 'English (US) has not built changes.' with 'Build' and 'Test' buttons. The 'Intent: BookHotel' section includes an 'Info' icon and a description: 'An intent represents an action that fulfils a user's request. Intents can have arguments called slots that represent variable information.' Below this is the 'Conversation flow' section. The 'Intent details' section contains: 'Intent name' (BookHotel), 'Intent and utterance generation description' (Hotel Booking), and 'ID: KXDSILIV3O'. At the bottom are 'Editor', 'Visual builder', and 'New' buttons, along with a 'Save intent' button.

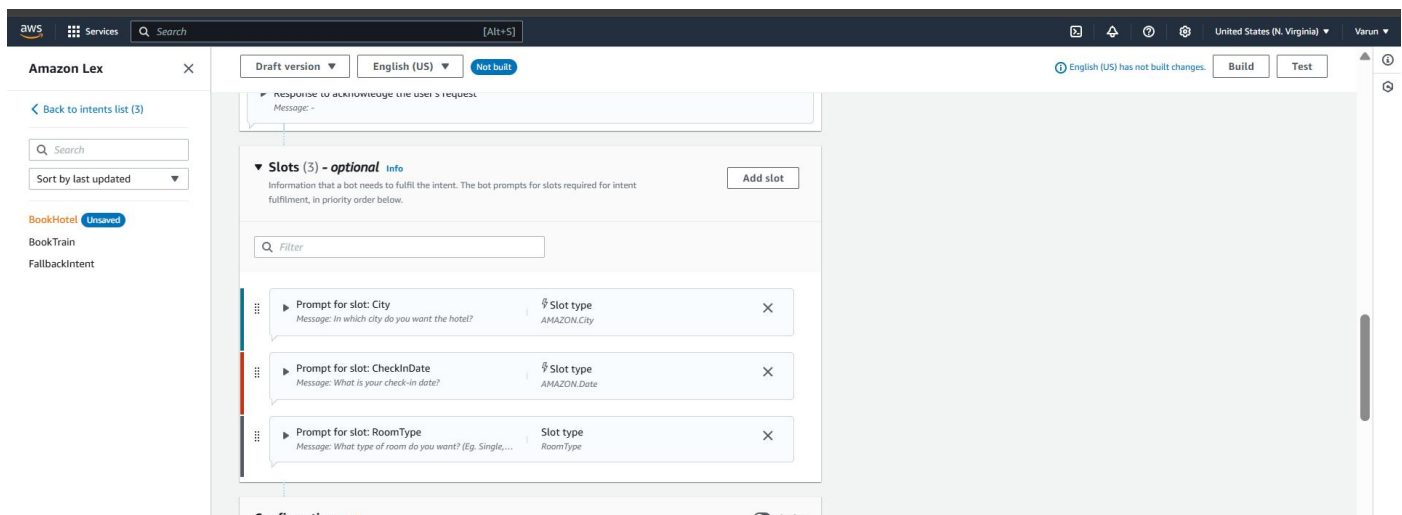
Creating a customer slot type

The screenshot shows the Amazon Lex console interface for configuring a slot type named 'RoomType'. The breadcrumb navigation is: Lex > Bots > Bot: TravelBooking > Versions > Version: Draft > All languages > Language: English (US) > Slot types > Slot type: RoomType. The page has tabs for 'Draft version', 'English (US)', and 'Not built'. The 'Slot type: RoomType' section includes an 'Info' icon and a description: 'A slot type is a list of values used to capture values for a slot.' Below this is the 'Slot type details' section. The 'Slot value resolution' section has two radio buttons: 'Expand values (default)' (selected) and 'Restrict to slot values'. The 'Slot type values' section includes a search bar, a list of values (Single Bedroom, Double Bedroom, Triple Bedroom), and an 'Add value' button. At the bottom is a checkbox for 'Use slot values as custom vocabulary'.

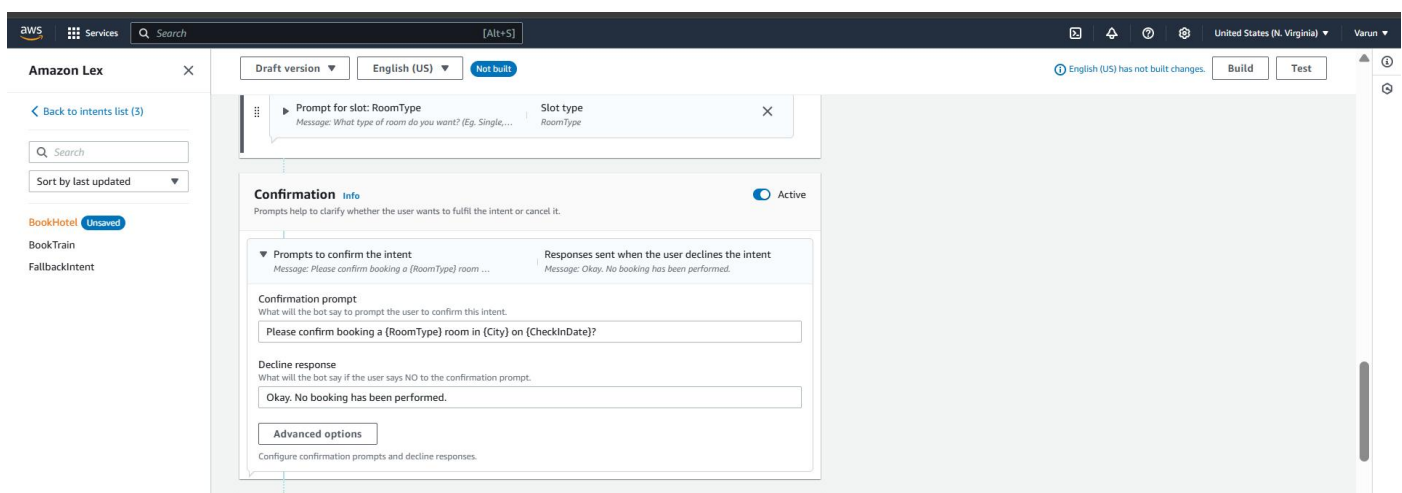
Sample Utterances for the Intent

The screenshot shows the Amazon Lex console interface for viewing sample utterances for the 'BookHotel' intent. The breadcrumb navigation is: Lex > Bots > Bot: TravelBooking > Versions > Version: Draft > All languages > Language: English (US) > Intents > Intent: BookHotel. The page has tabs for 'Draft version', 'English (US)', and 'Not built'. The 'Sample utterances (5)' section includes an 'Info' icon, a 'What's this?' link, and a 'Generate utterances' button. A notification states: 'To generate utterances, you must have permissions to Amazon Bedrock. Amazon Lex will make calls to Amazon Bedrock. Additional charges may be incurred based on the usage of Amazon Bedrock. Learn more.' Below this is a search bar, a 'Sort by added (ascending)' dropdown, and 'Preview' and 'Plain text' buttons. The sample utterances are: 'I want to book a hotel', 'Book a room in [City]', 'The check in date is [CheckInDate]', 'The room type is [RoomType]', and 'I need accommodation in [City] on [CheckInDate]'.

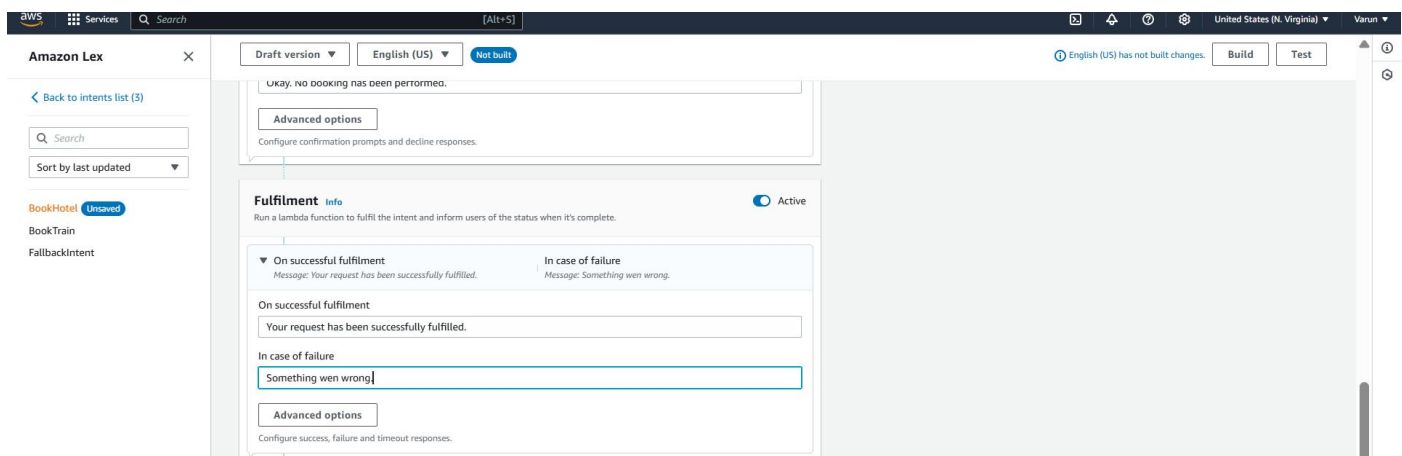
Adding slots for the intent (2 built-in and 1 custom slot)



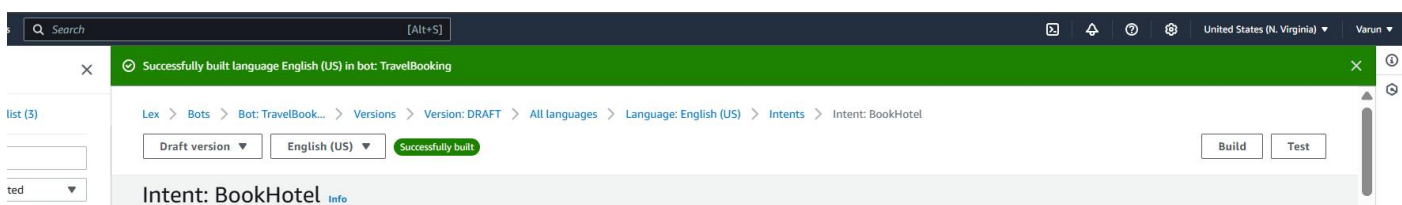
Adding a confirmation message



Adding a fulfillment message



Building the bot



Test Draft version

Last build submitted:Now

Inspect

I want to book a train

From which city are you travelling?


Hyderabad

What is your destination city?

Delhi

When do you want to travel?

Ready for complete testing

 Type a message

Test Draft version

Last build submitted:Now

Inspect

Delhi

When do you want to travel?


Today

Which berth do you want?

Lower

Do you want to confirm your train from Hyderabad to Delhi on 2025-06-16?

Ready for complete testing

 Type a message

Test Draft version

Last build submitted:Now

Inspect

Do you want to confirm your train from Hyderabad to Delhi on 2025-06-16?

Yes

Your train from Hyderabad to Delhi on 2025-06-16 has been booked.

Ready for complete testing

Type a message

Test Draft version

Last build submitted:1 minute ago

Inspect

Book a hotel

In which city do you want the hotel?

Delhi

What is your check-in date?

2025-06-17

What type of room do you

Ready for complete testing

Type a message

Test Draft version

Last build submitted:1 minute ago

Inspect

What type of room do you want? (Eg. Single, Double)

Double

Please confirm booking a Double room in Delhi on 2025-06-17?

yes

Your request has been successfully fulfilled.

Ready for complete testing

Type a message