Conversational Interfaces Using Amazon Lex

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INTRODUCTION

Amazon Web Services (AWS) is a secure cloud services platform which offers power, database storage, content delivery to scale and grow businesses. It Provides services in various sectors like, Analytics, AR & VR, Blockchain, Developer Tools, Game Tech, etc.

Amazon Lex is an AWS service for building conversational interfaces for applications using voice and text, which uses high quality speech recognition and natural language understanding capabilities to build voice and text chat Bots for your applications. Amazon Lex integrates with AWS Lambda which you can use to easily trigger functions for execution of your back-end business logic for data retrieval and updates. Amazon Lex provides a scalable, secure, easy to use, end-to-end solution to build, publish and monitor your bots

Amazon Lex – Uses Cases

Informational Bots
Chatbots for every day consumer requests
News Updates, Weather Information

Application Bots
Build Powerful interfaces for applications
Book Tickets, E-commerce sites

Internet of Things Bots
Enable conversational interfaces for device interactions
Alexa, Wearables

Enterprise Productivity Bots
Streamline enterprise work activities and improve efficiencies
Check Sales numbers, Inventory Status

What makes up a Lex Bot ?

Bots can be used to book a flight, order a pizza and make an appointment. Each bot has a purpose. The idea of LEX is to minimize the amount of code you need to write.
For example, Lex remembers the context and can manage the flow of the conversation. (This is good, well, it also requires good design).

AMAZON LEX KEY FEATURES

> High quality speech recognition and natural language understanding

> Multi-turn Conversations

> Utility Prompts

> Integration with AWS Lambda

> Connect to Enterprise Systems

> One-click Deployment to Multiple Platforms

> Powerful Lifecycle Management Capabilities

> Intent Chaining

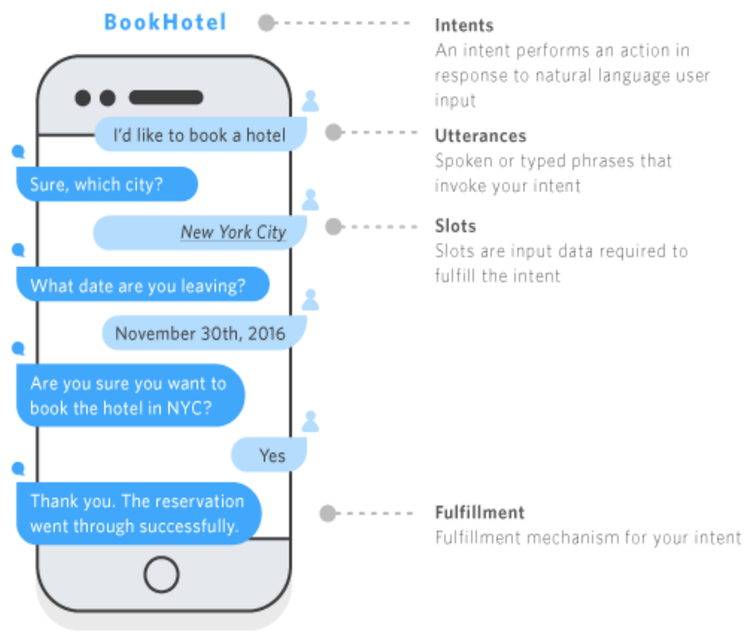
> 8 kHz Telephony Audio Support

HOW IT WORKS

Amazon Lex bots can understand user input provided with text or speech and converse in natural language. You can create Lambda functions and add them as code hooks in your intent configuration to perform user data validation and fulfillment tasks.

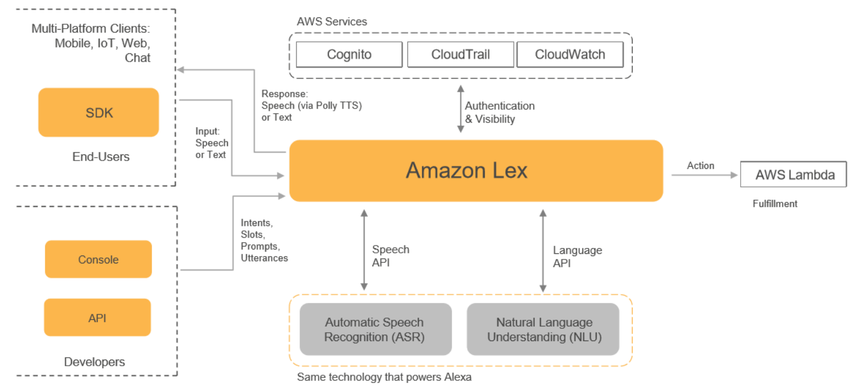
The core concepts of the Amazon Lex are

- Intents
- Utterances
- Slots
- Fulfillment



TECHNOLOGY ARCHITECTURE

Amazon Lex uses SDK's to Simplify using Amazon Lex in your applications with an API tailored to your programming language or platform.



RESULTS