



**GitHub:** [github.com/wizelineacademy/alexa-workshop](https://github.com/wizelineacademy/alexa-workshop)

WIZELINE

# Alexa Skill Workshop

## From idea to production in a day

By [Gustavo Córdova](#)  
March 22nd, 2018

# Our Mentors

- Israel Gomez
- Sergio Baez
- Oswaldo Herrera
- Juan Jose Flores
- Abraham González

# Why Speech?



# AGENDA

- Voice Ecosystem
- Use Cases
- Getting Started with Lambda and ASK
- ***15 min break***
- Coding an Alexa Skill
- Publishing & Challenges
- Closing

# Are we there yet?

*The current voice ecosystem*

APPLICATIONS

*AI Software*



*Hardware*

amazon.com

Google



# Use Cases

*The current voice ecosystem*

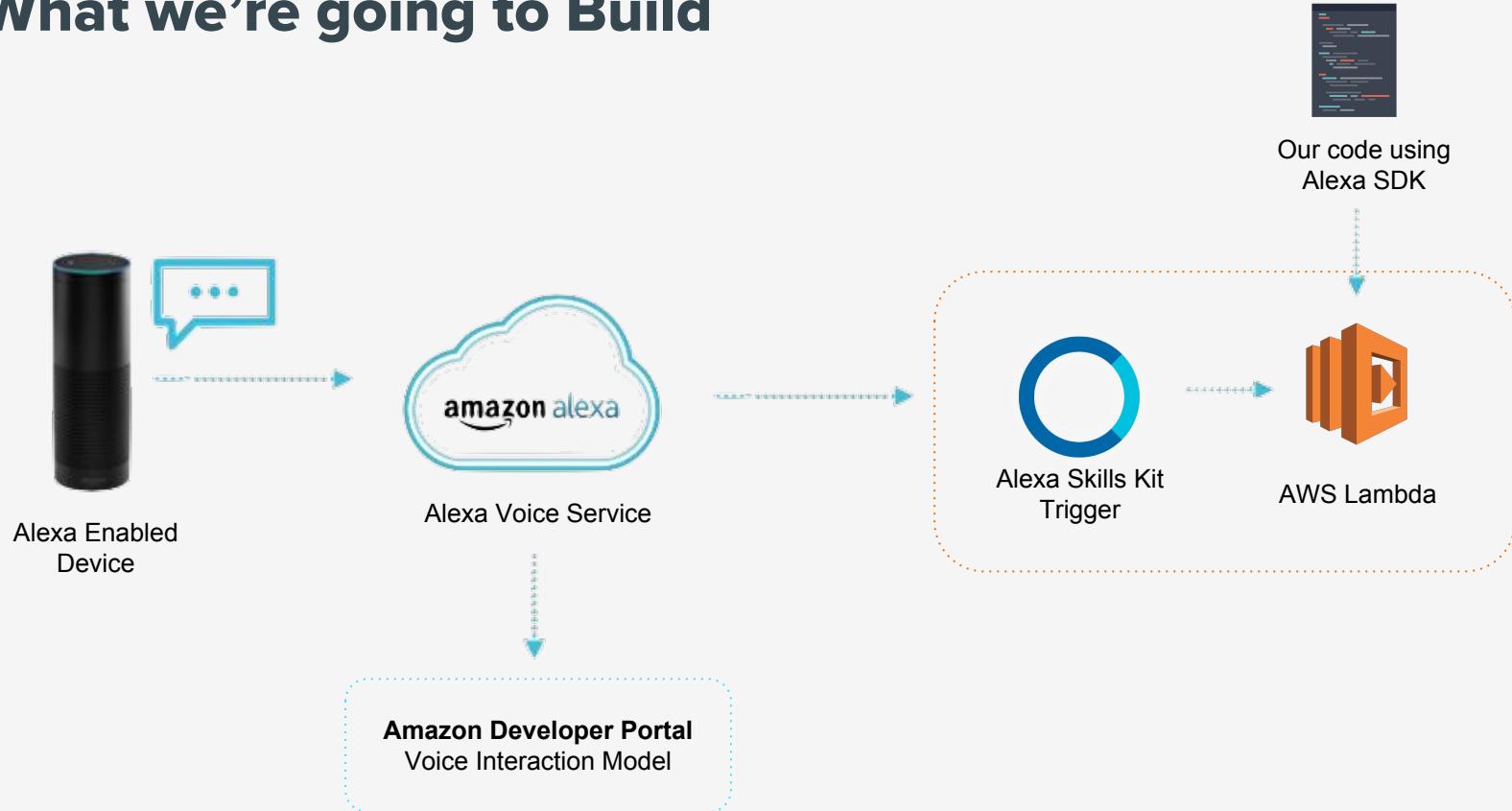


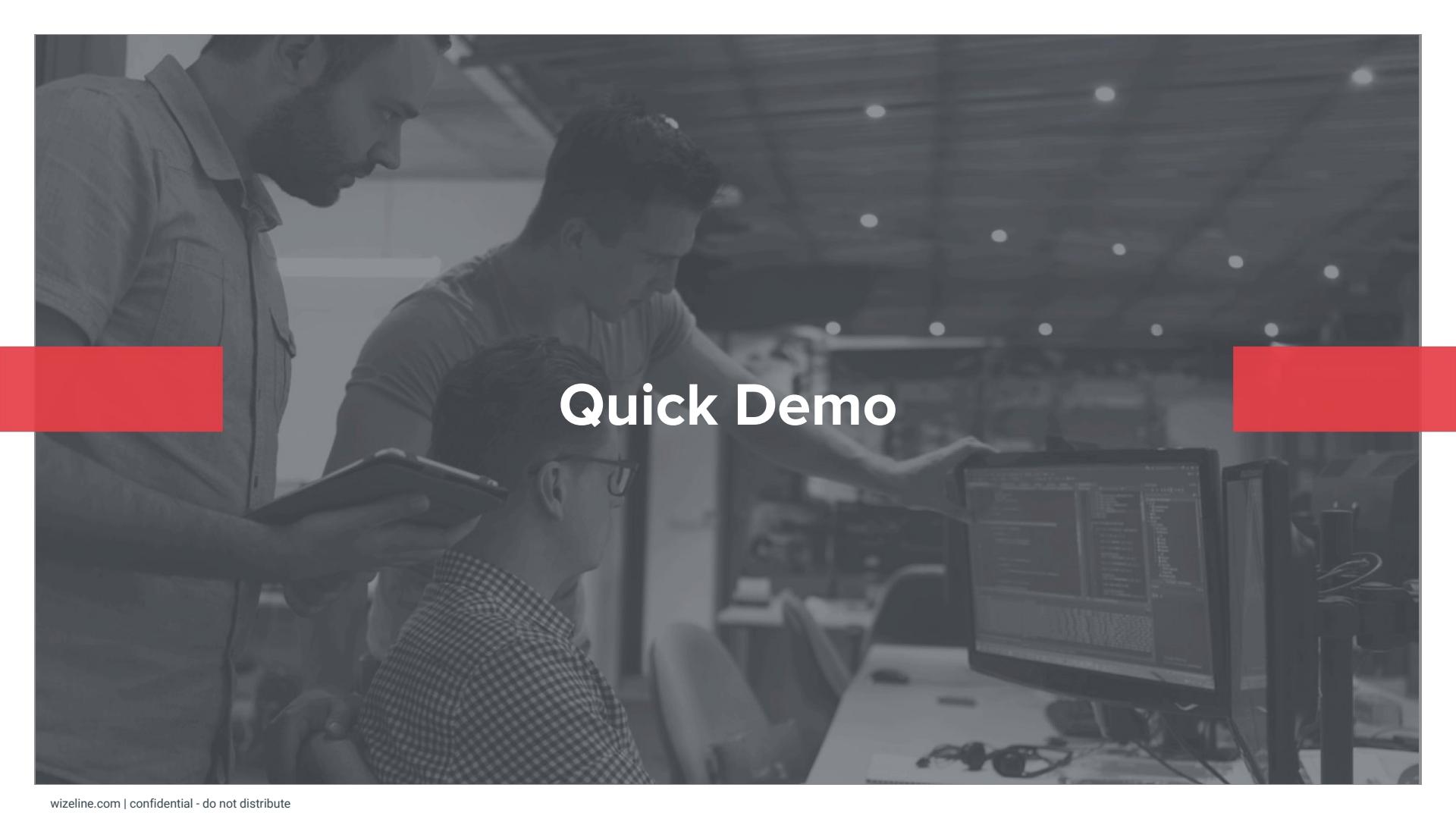
# Alexa Skill Types

- Custom Skills
- Smart Home Skills
- Flash Briefing Skills
- Video Skills
- List Skills

# Alexa Voice Service\*

# What we're going to Build





# Quick Demo

# Design for Voice





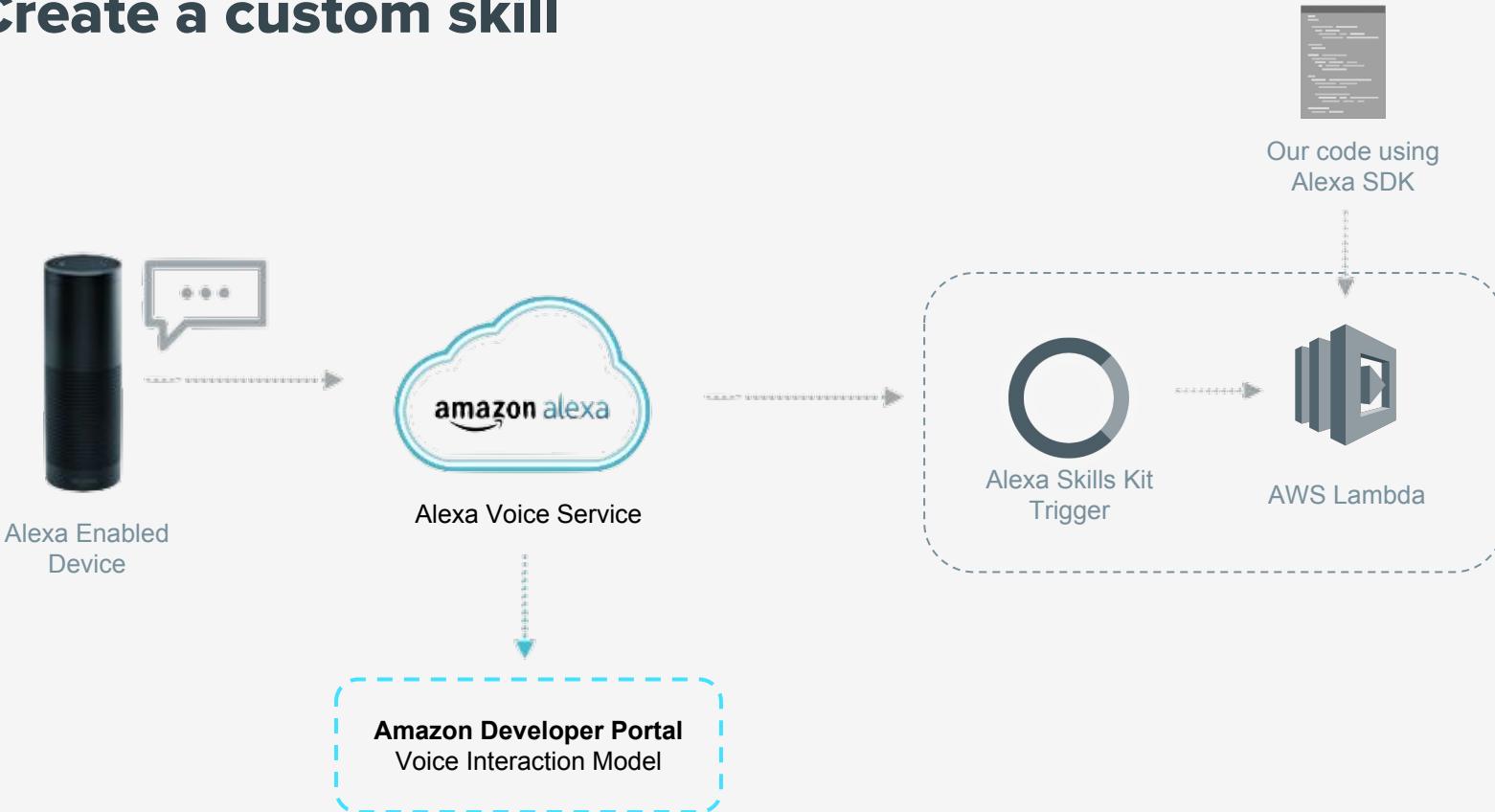
# Design Break Out

10min

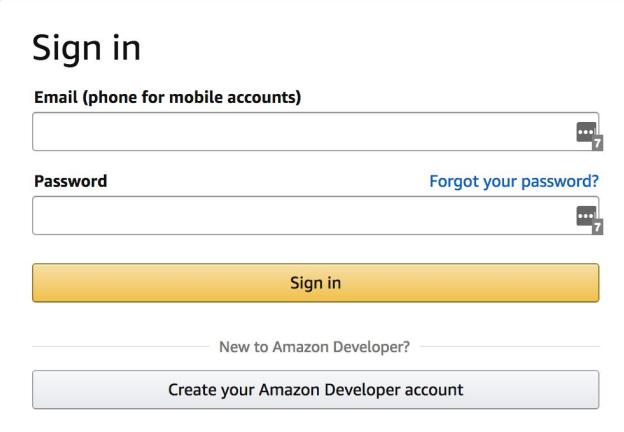
# Glossary

- **Skill:** A capability or ability of Alexa (an app).
- **Invocation Name:** Skill name, used to launch the application.
- **Intent:** A request or command associated with a user interaction that the service can handle.
- **Utterance:** A word that the user says to trigger an intent.
- **Slot:** An argument to an intent.

# Create a custom skill



Visit: <https://developer.amazon.com/alexa/console/ask>



The image shows the Amazon Developer sign-in page. At the top is the Amazon logo with "Developer" underneath. Below it is a "Sign in" button. The form has two input fields: "Email (phone for mobile accounts)" and "Password", each with a character count indicator (7). To the right of the password field is a "Forgot your password?" link. A large yellow "Sign in" button is centered below the inputs. Below the button is a link for "New to Amazon Developer?". At the bottom of the form is a "Create your Amazon Developer account" button.

Conditions of Use   Privacy Notice   Help

© 1996-2018, Amazon.com, Inc. or its affiliates

Go to: <https://developer.amazon.com/alexza/console/ask>

The screenshot shows the Alexa Skills Kit Developer Console Beta interface. At the top, there's a navigation bar with the Amazon Alexa logo, links for 'Your Alexa Consoles', 'GC', '?', and a search icon, and a 'Feedback forum' link. Below the navigation bar, a welcome message reads: 'Welcome to the new Alexa Skills Kit Developer Console Beta. You can switch back to the old console at any time. But while you are here, take a look around! Curious about what's new? Watch the video overview or read about what's changed. Make sure to check for unsupported features. You can also watch short walk-through videos of our revised console pages for: Build, Test, Launch, and Measure.' A 'Switch to old console' link is also present. The main area is titled 'Alexa Skills' and contains a table with columns: SKILL NAME, LANGUAGE, TYPE, MODIFIED, STATUS, and ACTIONS. Three skill entries are listed, each with a question mark icon, a blurred skill name, English (US) language, Custom type, a blurred modified date, and 'In Development' status. Each row has 'Measure', 'Edit', and 'Delete' actions. A large red arrow points to the 'Create Skill' button in the top right corner of the table area.

SKILL NAME	LANGUAGE	TYPE	MODIFIED	STATUS	ACTIONS
?	English (US)	Custom		● In Development	Measure   Edit   Delete
?	English (US)	Custom		● In Development	Measure   Edit   Delete
?	English (US)	Custom		● In Development	Measure   Edit   Delete

## Create a new skill

2

Next

Hello World  1Skill created will default to [English \(US\)](#) ▾

←

BACK

## Choose a model to add to your skill

There are many ways to start building a skill, you can design your own custom model or start with a pre-built model. Pre-built models are interaction models that contain a package of intents and utterances that you can add to your skill.



### Custom

Design a unique experience for your users. A custom model enables you to create all of your skills interactions.

[Select](#)



### PRE-BUILT MODEL

#### Flash Briefing

Give users control of their news feed. This pre-built model lets users control what updates they listen to.

[View example phrases](#)

[Select](#)



### PRE-BUILT MODEL

#### Smart Home

Gives users control of their smart home devices. This pre-built model lets users turn off the lights and other devices without getting up.

[View example phrases](#)

[Select](#)

2

[Create skill](#)

English

© 2010-2018, Amazon.com, Inc. or its affiliates. All Rights Reserved.

[Terms](#)

[Alexa Developer Blog](#)

[Alexa Skills Kit](#)

wizeline.com | confidential - do not distribute

17

# Interaction Model

The configuration for an Alexa skill must include the following components to define the voice interface:

1. An **Intent Schema**: The intents your service can accept and process.
2. The **Spoken Input Data**:
  - **Sample Utterances**: Representative spoken phrases.
  - **Custom Slots**: Values for specific items referenced in the intents.

# Interaction Model

## Intent

*MovieRecommendation*

## Utterances

*Recommend me a {slot} movie*

*What's a good {slot} movie*

*Tell me a {slot} movie*

## Slots

*Horror*

*Drama*

*Comedy*

English (U.S.)

Save Model

Build Model

## CUSTOM

Interaction Model

Invocation

Intents (3)

+ Add

Built-In Intents (3)

AMAZON.CancelIntent

AMAZON.HelpIntent

AMAZON.StopIntent

Slot Types (0)

+ Add

JSON Editor

Interfaces

Endpoint

## Add Intent

An intent represents an action that fulfills a user's spoken request. [Learn more](#) about intents.

Create custom intent ?

1

NameIntent

Create custom intent

2

Use an existing intent from Alexa's built-in library ?

[Learn more](#) about using built-in intents.

Search built-ins

144/144

Name	Description
 Books 16 built-ins	Intents asking about books and other written works, such as rating books, adding books to reading lists, or navigating through audio books.

[developer.amazon.com/alexa/console/ask/build/custom/endpoint](#)

AMAZON.CancelIntent

AMAZON.HelpIntent

AMAZON.StopIntent

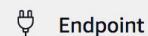
Slot Types (0)

+ Add

JSON Editor



Interfaces



Endpoint

ACCOUNT LINKING

PERMISSIONS



This intent has no sample utterances

A sample utterance is a phrase a user might speak to invoke the intent.

< 0 – 0 of 0 >

Show All

### Intent Slots (0) (?)

ORDER	NAME	SLOT TYPE	ACTIONS
1	name_type	Select a slot type	<a href="#">Edit</a> <a href="#">Dialog</a> <a href="#">Delete</a>



### Intent Confirmation

Does this intent require confirmation?



English

English (U.S.)

Save Model

Build Model

## CUSTOM

Interaction Model

### Invocation

### Intents (4)

+ Add

#### NamelIntent

-

name\_type

-

#### Built-In Intents (3)

AMAZON.CancelIntent

AMAZON.HelpIntent

AMAZON.StopIntent

### Slot Types (0)

+ Add

### JSON Editor

Interfaces

Endpoint

## Intents / NamelIntent

### Sample Utterances (2) ?

What's your	
Slots in sample utterances "{'name_type': 'name_type'}"	

What's your	
Hi	

< 1 – 2 of 2 > Show All

Select an Existing Slot

name\_type

OR

Create a new slot

slot name  Add

ORDER	NAME	SLOT TYPE	ACTIONS
1	name_type	Select a slot type	Edit Dialog Delete

developer.amazon.com/alexa/console/ask/build/custom.../endpoint

English (U.S.)

Save Model

Build Model

## CUSTOM

Interaction Model

### Invocation

#### Intents (4)

+ Add

##### NameIntent



name\_type



##### Built-In Intents (3)

AMAZON.CancelIntent

AMAZON.HelpIntent

AMAZON.StopIntent

#### Slot Types (0)

+ Add

JSON Editor

Interfaces

Endpoint

## Intents / NameIntent

### Sample Utterances (4) (?)

What might a user say to invoke this intent?



Who are you



What's your {name\_type}



What's your name



Hi



< 1 – 4 of 4 > Show All

### Intent Slots (1) (?)

ORDER (?)

NAME (?)

SLOT TYPE (?)

ACTIONS

English (U.S.)

Save Model

Build Model

## CUSTOM

Interaction Model

Invocation

Intents (4)

+ Add

NameIntent



name\_type



Built-In Intents (3)

AMAZON.CancelIntent

AMAZON.HelpIntent

AMAZON.StopIntent

Slot Types (0)

+ Add

JSON Editor

Interfaces

Endpoint

## Slot Types

+ Add Slot Type

2

Filter Slot Types



NAME	SLOT VALUES	TYPE	ACTIONS
	No types available		

0 – 0 of 0 Slot Types

Show All

1

## CUSTOM

## Interaction Model

## Invocation

## Intents (4)

Add

## NameIntent

name\_type

## Built-In Intents (3)

AMAZON.CancelIntent

AMAZON.HelpIntent

AMAZON.StopIntent

## Slot Types (0)

Add

## JSON Editor

## Interfaces

## Endpoint

## Add Slot Type

Slot types define how data in an intent slot is recognized and handled. All intent slots must be assigned a slot type. [Learn more](#) about using slot types.

 Create custom slot type 

1

NAME\_TYPES

Create custom slot type

2

 Use an existing slot type from Alexa's built-in library [Learn more](#) about using built-in slot types.

Search built-ins



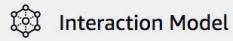
96/96 built-ins

Name

Description

List Types  
89 built-ins

These slot types each represent a list of items. You can extend these slot types with additional values.

**CUSTOM**

Invocation

▼ Intents (4)

**+ Add**

▼ NameIntent



name\_type



▼ Built-In Intents (3)

AMAZON.CancelIntent

AMAZON.HelpIntent

AMAZON.StopIntent

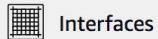
▼ Slot Types (1)

**+ Add**

NAME\_TYPES



JSON Editor



Endpoint

**ACCOUNT LINKING**

# Slot Types / NAME\_TYPES

## Slot Values (4) (?)

Search



Enter a new value for this slot type

**+**VALUE (?)ID  
(OPTIONAL)  
(?)SYNONYMS (OPTIONAL)  
(?)

full

Enter ID

Add synonym

**+**

last

Enter ID

Add synonym

**+**

middle

Enter ID

Add synonym

**+**

first

Enter ID

Add synonym

**+**

&lt; 1 - 4 of 4 &gt;

Show All

English (U.S.)

Save Model

Build Model

## CUSTOM

Interaction Model

### Invocation

Intents (4)

+ Add

NameIntent



name\_type



Built-In Intents (3)

1

AMAZON.CancelIntent

AMAZON.HelpIntent

AMAZON.StopIntent

Slot Types (1)

+ Add

NAME\_TYPES



JSON Editor

Interfaces

Endpoint

## Intents / NameIntent / name\_type

2

### Slot Type

NAME\_TYPES



To use these prompts and utterances in your skill, return the `Dialog.Delegate` directive in your skill's response.  
[Learn more about using Dialog directives.](#)

### Slot Filling

Is this slot required to fulfill the intent?



### Slot Confirmation

Does this slot require confirmation?



# Invocation Types

- **Full Intent:** Spoken request in which the user expresses everything required to complete their request (or intent) in a single utterance.

*Alexa, ask **Movie Facts** which is the best movie of 2016.*

- **Partial Intent:** Spoken request that contains only a subset of what's required to take action on the request.

*Alexa, ask **Movie Facts** which is the best movie.*

- **No Intent:** Spoken request that contains none or minimal information about the user request.

*Alexa, open the **Movie Facts**.*



## Interaction Model

### Invocation

#### Intents (4)

##### NameIntent

name\_type

##### Built-In Intents (3)

AMAZON.CancelIntent

AMAZON.HelpIntent

AMAZON.StopIntent

#### Slot Types (1)

NAME\_TYPES



### Interfaces

### Endpoint

### ACCOUNT LINKING

### PERMISSIONS

Users say a skill's invocation name to begin an interaction with a particular custom skill.

For example, if the invocation name is "daily horoscopes", users can say:

User: Alexa, ask daily horoscopes for the horoscope for Gemini

1

2

Skill Invocation Name

hello world



### Invocation name requirements

Your invocation name should be two or more words, and can contain only lower-case alphabetic characters, spaces between words, possessive apostrophes (for example, "sam's science trivia"), or periods used in abbreviations (for example, "a. b. c."). Other characters like numbers must be spelled out. For example, "twenty one".

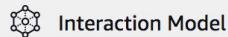
Invocation names cannot contain any of the Alexa skill launch phrases such as "launch", "ask", "tell", "load", "begin", and "enable". Wake words including "Alexa", "Amazon", "Echo", "Computer", or the words "skill" or "app" are not allowed. [Learn more](#) about invocation names for custom skills.

Changes to your skill's invocation name will not take effect until you have built your skill's interaction model. In order to successfully build, your skill's interaction model must contain an intent with at least one sample utterance. [Learn more](#) about creating interaction models for custom skills.

Save Model

Build Model

## CUSTOM



## Invocation

## Intents (4)

Add

## NameIntent



name\_type



## Built-In Intents (3)

AMAZON.CancelIntent

AMAZON.HelpIntent

AMAZON.StopIntent

## Slot Types (1)

Add

NAME\_TYPES



JSON Editor

## Invocation

1

2

Users say a skill's invocation name to begin an interaction with a particular custom skill.

For example, if the invocation name is "daily horoscopes", users can say:

User: Alexa, ask daily horoscopes for the horoscope for Gemini

Skill Invocation Name



## Invocation name requirements

Your invocation name should be two or more words, and can contain only lower-case alphabetic characters, spaces between words, possessive apostrophes (for example, "sam's science trivia"), or periods used in abbreviations (for example, "a. b. c."). Other characters like numbers must be spelled out. For example, "twenty one".

[developer.amazon.com/alexza/console/ask/build/custom.../json-editor](https://developer.amazon.com/alexza/console/ask/build/custom.../json-editor)

# Prompt Types

- **Question:** Invites the user to continue the interaction.

**User:** Alexa, ask **Movie Facts** to recommend me a movie.

**Alexa:** Which one is your favorite genre?

- **Statement:** Finishes the interaction at the end of the request.

**User:** Alexa, tell me the latest from the **Movie Facts**.

**Alexa:** These is the latest movie fact, ...

# Response Messages

- Playback Response
  - Alexa response
  - Audio file Responses
  - Video file Responses
- Visual Aid
  - Companion App Card
  - TV Card
  - Echo Show Template

 English (U.S.) Save Interfaces Build Model

## CUSTOM

 Interaction Model

## Invocation

▼ Intents (4) ▼ NameIntent  name\_type 

## ▼ Built-In Intents (3)

AMAZON.CancelIntent

AMAZON.HelpIntent

AMAZON.StopIntent

Slot Types (0) 

## JSON Editor

 Interfaces Endpoint

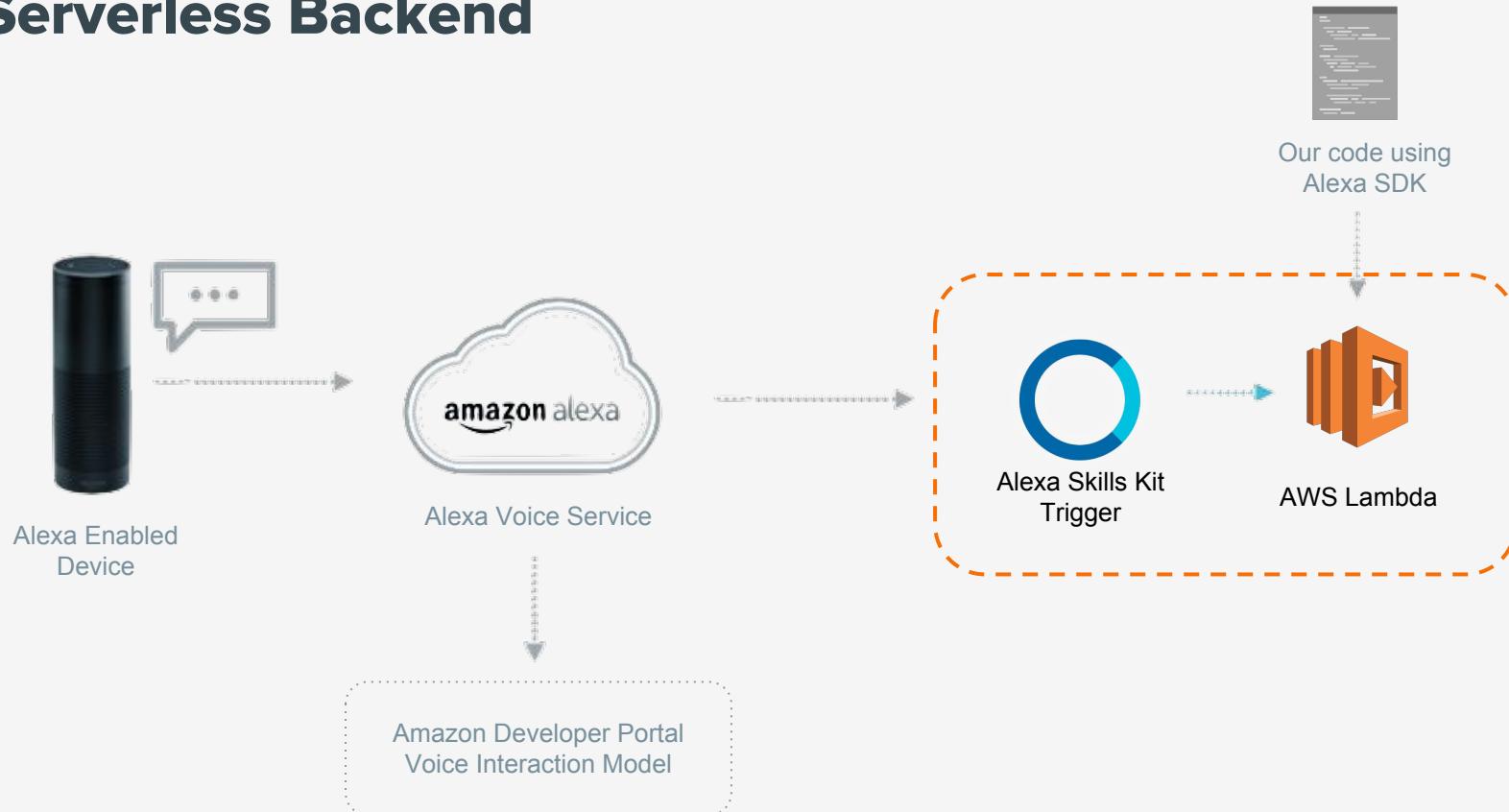
## Interfaces



Enabling interfaces may add additional required intents to your interaction model. You will need to BOTH save interface changes and re-build your model for any updates to take effect.

NAME	DESCRIPTION	
Audio Player	The AudioPlayer interface provides directives and requests for streaming audio and monitoring playback progression. <a href="#">Learn more</a> about the Audio Player Interface.	<input type="checkbox"/>
Display Interface	Echo Show allows skill developers to create skills for Alexa that use both screen and voice interaction. <a href="#">Learn more</a> about the Display Interface.	<input type="checkbox"/>
Video App	The VideoApp interface provides the VideoApp.Launch directive for streaming native video files in Echo Show. <a href="#">Learn more</a> about the VideoApp Interface.	<input type="checkbox"/>

# Serverless Backend



# Alexa Skills Kit (ASK)

- The Alexa Skills kit is a collection of self-service APIs, tools, documentation, and code samples that allow the rapid aggregation of skills to Alexa.
- The kit includes an [Alexa SDK for Node.js](#).

For more information, see the [Alexa Skills Kit's documentation](#).

## { package.json ●

```
1  {
2    "name": "alexaworkshop",
3    "version": "1.0.0",
4    "description": "Alexa Skill startup project for the Alexa Workshop from Wizeline Academy",
5    "contributors": [
6      {
7        "name": "Gustavo Córdova",
8        "email": "gustavo@wizeline.com"
9      }
10   ],
11   "main": "index.js",
12   "scripts": {
13     "start": "node index.js"
14   },
15   "repository": {
16     "type": "git",
17     "url": "git+https://github.com/wizelineacademy/alexa-workshop.git"
18   },
19   "author": "Gustavo Cordova <gustavo@wizeline.com>",
20   "license": "Apache-2.0",
21   "bugs": {
22     "url": "https://github.com/wizelineacademy/alexa-workshop/issues"
23   },
24   "homepage": "https://github.com/wizelineacademy/alexa-workshop#readme",
25   "dependencies": {
26     "alexa-sdk": "^1.0.25"
27   }
28
29
```

# Response vs. Response Builder

## Tell

```
// Sample Tell Output

// Using Response
this.emit(':tell', 'Hello World!');

// Using Response Builder
this.response.speak('Hello World!');
this.emit(':responseReady');
```

## Ask

```
// Sample Ask Output

// Using Response
this.emit(':ask', 'What would you like to do?', 'Please say that again?');

// Using Response Builder
this.response.speak('What would you like to do?')
  .listen('Please say that again?');
this.emit(':responseReady');
```

# AWS Lambda

- **Handler** – Handler is the function AWS Lambda calls to start execution of your Lambda function. Your handler should process the incoming event data and may invoke any other functions/methods in your code.
- **Execute** – Execute is the function in the Alexa Object that will run your skill's logic.

**Note:** Lambda functions for Alexa skills can be hosted in either the **US East (N. Virginia)** or **EU (Ireland)** region. These are the only regions the Alexa Skills Kit supports.

```
js sample-handler.js ●  
1  var handlers = {  
2    'LaunchRequest': function () {  
3      this.emit(':tell', 'Hello World!');  
4    }  
5  };  
6  
7  exports.handler = function (event, context, callback) {  
8    var alexa = Alexa.handler(event, context, callback);  
9    alexa.registerHandlers(handlers);  
10   alexa.execute();  
11};  
12  
13
```

# Clone Repository

```
~ git clone git@github.com:wizelineacademy/alexa-workshop.git
```

or download from:  
<https://github.com/wizelineacademy/alexa-workshop>

Visit: <https://console.aws.amazon.com/>

**aws**

**Sign in** ?

**Email address of your AWS account**

To sign in as an IAM user, enter your [account ID](#) or [account alias](#) instead.

**Next**

---

New to AWS?

**Create a new AWS account**

---

**About Amazon.com Sign In**

Amazon Web Services uses information from your Amazon.com account to identify you and allow access to Amazon Web Services. Your use of this site is governed by our Terms of Use and Privacy Policy linked below. Your use of Amazon Web Services products and services is governed by the AWS Customer Agreement linked below unless you



**AWS Accounts Include  
12 Months of Free Tier Access**

Including use of Amazon EC2, Amazon S3, and Amazon DynamoDB

Visit [aws.amazon.com/free](https://aws.amazon.com/free) for full offer terms



Services ▾

Resource Groups ▾



Gustavo ▾

N. Virginia ▾

Support ▾

## AWS services

[Lambda](#)**Lambda**

Run Code without Thinking about Servers

[Amazon Lex](#)

Build Voice and Text Chatbots

[CodeBuild](#)

Build and Test Code

[Launch a virtual machine](#)With EC2  
~2-3 minutes[Build a web app](#)With Elastic Beanstalk  
~6 minutes[Build using virtual servers](#)With Lightsail  
~1-2 minutes[Connect an IoT device](#)With AWS IoT  
~5 minutes[Start a development project](#)With CodeStar  
~5 minutes[Register a domain](#)With Route 53  
~3 minutes[See more](#)[See all ↗](#)

## Learn to build

Learn to deploy your solutions through step-by-step guides, labs, and videos.

## Helpful tips

[Manage your costs](#)Get real-time billing alerts based on your cost and usage budgets. [Start now](#)[Create an organization](#)Use AWS Organizations for policy-based management of multiple AWS accounts. [Start now](#)

## Explore AWS

[Amazon Relational Database Service \(RDS\)](#)RDS manages and scales your database for you. RDS supports Aurora, MySQL, PostgreSQL, MariaDB, Oracle, and SQL Server. [Learn more. ↗](#)[Real-Time Analytics with Amazon Kinesis](#)Stream and analyze real-time data, so you can get timely insights and react quickly. [Learn more. ↗](#)



Services ▾

Resource Groups ▾



Gustavo ▾

N. Virginia ▾

Support ▾

## AWS Lambda



Dashboard

**Functions**

Lambda &gt; Functions

**Functions (3)**

Actions ▾

**Create function**

Filter by tags and attributes or search by keyword



1



Description

Runtime ▾

Code size ▾

Last Modified ▾

Function name ▾


Feedback



English (US)

## Create function

1

 Author from scratch

Start with a simple "hello world" example.

 Blueprints

Choose a preconfigured template as a starting point for your Lambda function.

 Serverless Application Repository

Find and deploy serverless apps published by developers, companies, and partners on AWS.



### Author from scratch Info

Name\*



2

Runtime\*



3

Role\*



Name

myAlexaSkill



Runtime\*

Node.js 6.10



Role\*

Defines the permissions of your function. Note that new roles may not be available for a few minutes after creation. [Learn more](#) about Lambda execution roles.

Create new role from template(s)



4

Lambda will automatically create a role with permissions from the selected policy templates. Note that basic Lambda permissions (logging to CloudWatch) will automatically be added. If your function accesses a VPC, the required permissions will also be added.

Role name\*

Enter a name for your new role.

myAlexaSkillRole



5

Policy templates

Choose one or more policy templates. A role will be generated for you before your function is created. [Learn more](#) about the permissions that each policy template will add to your role.



7

Simple Microservice permissions X



6

Cancel

Create function



Services ▾

Resource Groups ▾



Gustavo ▾

N. Virginia ▾

Support ▾



# myAlexaSkill

Qualifiers ▾

Actions ▾

Select a test event.. ▾

Test

Save



Configuration

Monitoring

## ► Designer

### Function code Info

Code entry type

Upload a .ZIP file

Runtime

Node.js 6.10

Handler Info

index.handler

Function package\*

Upload

HelloWorldSkill.zip (5.1 MB)

For files larger than 10 MB, consider uploading via S3.

4

### Environment variables

You can define Environment Variables as key-value pairs that are accessible from your function code. These are useful to store configuration settings without the need to

Feedback

English (US)

© 2008 - 2018, Amazon Web Services, Inc. or its affiliates. <https://console.aws.amazon.com/lambda/home?region=us-east-1#>



Services ▾

Resource Groups ▾



Gustavo ▾

N. Virginia ▾

Support ▾



myAlexaSkill

Qualifiers ▾

Actions ▾

Select a test event.. ▾

Test

Save



Configuration

Monitoring

## ▼ Designer

Click on a trigger from the list below to add it to your function.

API Gateway

AWS IoT

Alexa Skills Kit

Alexa Smart Home

CloudFront

CloudWatch Events

CloudWatch Logs

myAlexaSkill  
Saved

Alexa Skills Kit

Configuration required



Add triggers from the list on the left

2



Amazon CloudWatch Logs



Amazon DynamoDB



Resources the function's role has access to will be shown here

## Configure triggers



English (US)

© 2008 - 2018, Amazon Web Services, Inc. or its affiliates. All rights reserved. <https://console.aws.amazon.com/lambda/home?region=us-east-1#>

Go to: <https://developer.amazon.com/alexa/console/ask>

The screenshot shows the Alexa Skills Kit Developer Console Beta interface. At the top, there's a navigation bar with the Amazon Alexa logo, links for 'Your Alexa Consoles', 'GC', '?', and a search icon, and a 'Feedback forum' link. Below the header, a welcome message says 'Welcome to the new Alexa Skills Kit Developer Console Beta'. It encourages users to switch back to the old console if needed and provides links for a video overview and reading about what's changed. A 'Switch to old console' button is also present. The main content area is titled 'Alexa Skills' and features a 'Create Skill' button. A table lists skills based on various filters. One skill, 'Hello World', is highlighted with a red box around its thumbnail and name. A red arrow points to the thumbnail of the second skill in the list.

SKILL NAME	LANGUAGE	TYPE	MODIFIED	STATUS	ACTIONS
Hello World  amzn1.ask.skill.8de2dac4-7dda-4d7...	English (US)	Custom	2018-03-19	In Development	<a href="#">Measure</a>   <a href="#">Edit</a>   <a href="#">Delete</a>
[Thumbnail]	[Thumbnail]	[Thumbnail]	[Thumbnail]	[Thumbnail]	[Thumbnail]
[Thumbnail]	[Thumbnail]	[Thumbnail]	[Thumbnail]	[Thumbnail]	[Thumbnail]



## myAlexaSkill

SNS

Qualifiers ▾

Actions ▾

Select a test event.. ▾

Test

Save



## Configure triggers

Skill ID verification is an easy way to verify the Skill ID in an incoming request from a Skill. To set this up, enter the Skill ID (also called Application ID) of your skill located in your Alexa Skills Kit dashboard. [Learn more.](#)

## Skill ID verification

- Enable (recommended)  
 Disable

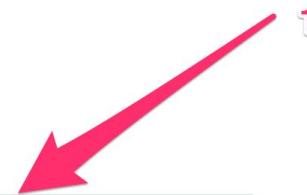
## Skill ID

Lambda will add the necessary permissions for Amazon Alexa to invoke your Lambda function from this trigger. [Learn more](#) about the Lambda permissions model.

Cancel

Add

1



3

2





Services ▾

Resource Groups ▾



Gustavo ▾

N. Virginia ▾

Support ▾



Lambda &gt; Functions &gt; myAlexaSkill



ARN - arn:aws:lambda:us-east-1:169228232860:function:myAlexaSkill

# myAlexaSkill

Qualifiers ▾

Actions ▾

Select a test event.. ▾

Test

Save

✓ Congratulations! Your Lambda function "myAlexaSkill" has been successfully created. You can now change its code and configuration. Click on the "Test" button to input a test event when you are ready to test your function.

Configuration

Monitoring

## ► Designer

### Function code Info

The deployment package of your Lambda function "myAlexaSkill" is too large to enable inline code editing. However, you can still invoke your function right now.

Code entry type

Edit code inline

Runtime

Node.js 6.10

Handler Info

index.handler



English (US)

© 2008 - 2018, Amazon Web Services, Inc. or its affiliates. All rights reserved. <https://console.aws.amazon.com/lambda/home?region=us-east-1#>

Go to: <https://developer.amazon.com/alex-console/ask>

The screenshot shows the Alexa Developer Console interface for creating a skill endpoint. The left sidebar has sections for Language (English (U.S.)), CUSTOM, Interaction Model, Invocation (Intents 3, Built-In Intents 3), Slot Types (0), JSON Editor, Interfaces, and ACCOUNT LINKING (Endpoint selected). The main area is titled 'Endpoint' with a 'Save Endpoints' button. It includes a note about Lambda endpoints and service endpoint types. The 'Service Endpoint Type' section shows three options: AWS Lambda ARN (selected), Default Region (Required), North America (Optional), and Europe and India. Red arrows numbered 1, 2, and 3 point to the 'Endpoint' tab in the sidebar, the ARN input field, and the 'Save Endpoints' button respectively.

English (U.S.)

CUSTOM

Interaction Model

Invocation

- Intents (3) + Add
- Built-In Intents (3)
- AMAZON.CancelIntent
- AMAZON.HelpIntent
- AMAZON.StopIntent

Slot Types (0) + Add

JSON Editor

Interfaces

Endpoint 1

ACCOUNT LINKING

PERMISSIONS

Save Endpoints 3

## Endpoint

The Endpoint will receive POST requests when a user interacts with your Alexa Skill. The request body contains parameters that your service can use to perform logic and generate a JSON-formatted response. Learn more about Lambda endpoints [here](#). You can host your own HTTPS web service endpoint as long as the service meets the requirements described [here](#).

### Service Endpoint Type

Select how you will host your skill's service endpoint.

AWS Lambda ARN (Recommended) 2

Default Region (Required)

arn:aws:lambda:us-east-1:169228232860:funct

North America (Optional)

arn:aws:lambda:us-east-1:<aws\_account\_id>:fur

Europe and India

arn:aws:la developer.amazon.com/alex-console/ask/build/permissions/.../en\_US

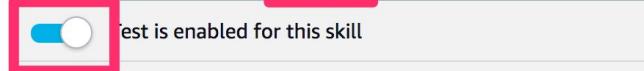
Hello World

Build

Test

Feature

Feedback forum



Alexa Simulator   Manual JSON   Voice & Tone

English (US) ②   Type or click and hold the mic ③

The Alexa Simulator interface shows two speech bubbles. The top one contains placeholder text 'Type or click and hold the mic'. The bottom one is a smaller, faint echo of the top one.

First, open your skill with your invocation name. Then start testing your dialog.

Skill I/O

JSON Input

1

JSON Output

1

Skill I/O is only available when you invoke a skill that created.

Go to: <https://echosim.io>

**Echosim.io**  
COMMUNITY EDITION BETA

Log In   Resources   Help

# Alexa Skill Testing Tool

An Amazon account is required. Log in with Amazon.

 Login with Amazon



wizeline.com | confidential - do not distribute

# Session

All requests include the version, context, and request objects at the top level.

The session object is included for all [standard requests](#), but it is not included for AudioPlayer, VideoApp, or PlaybackController requests.

The context object provides your skill with information about the current state of the service, this information is available in the session object.

**The session timeout is 8s, before jumping to a reprompt or closing the skill.**

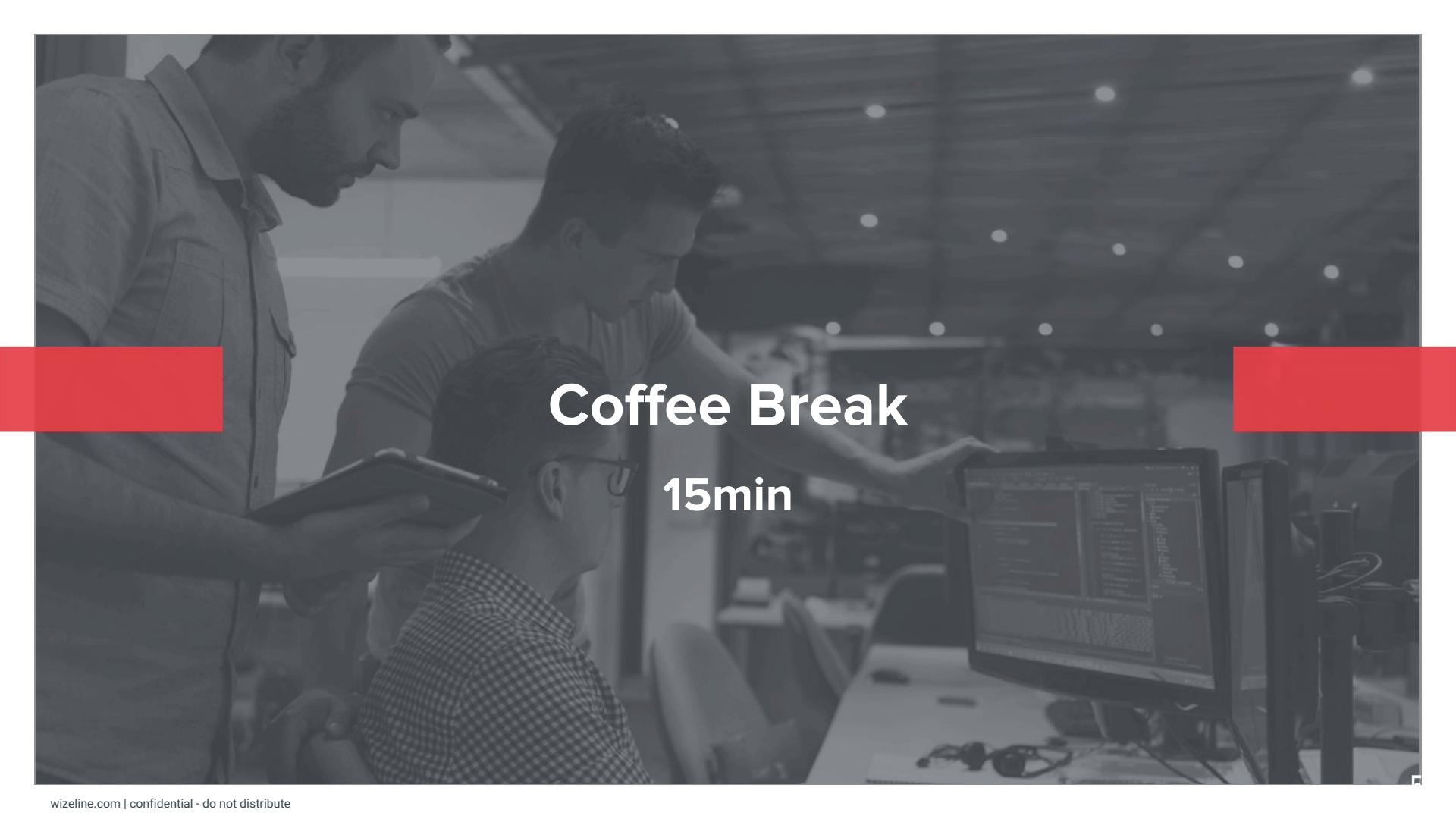
# SSML

SSML is a markup language that provides a standard way to mark up text for the generation of synthetic speech. The Alexa Skills Kit supports a *subset* of the tags defined in the SSML specification. The specific tags supported are listed in [Supported SSML Tags](#).

<speaking>

The word <`say-as interpret-as="characters"`>`read`</`say-as`> may be interpreted as either the present simple form <`w role="ivona:VB"`>`read`</`w`>, or the past participle form <`w role="ivona:VBD"`>`read`</`w`>.

</speaking>



# Coffee Break

15min



# Coding Session

# Steps to Publishing

- Publish Information
- Privacy & Compliance
- Testing
- Submit to Amazon
- Launch and earn some credits!

# Challenges



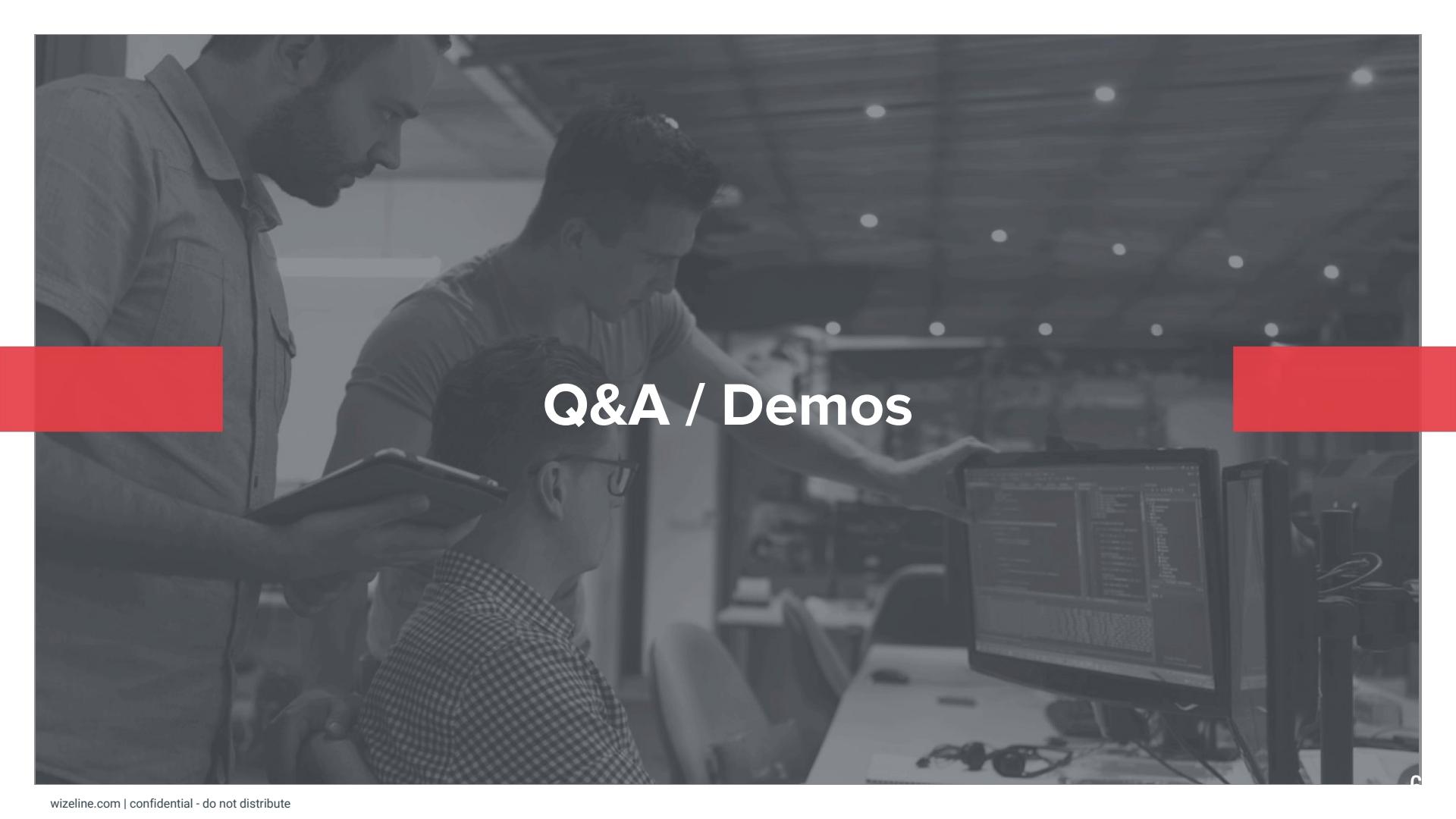
New vs Returning  
Users



3rd Party Limitations



Ecosystem constant  
evolution



# Q&A / Demos



THANK  
YOU

WIZELINE®

[gustavo@wizeline.com](mailto:gustavo@wizeline.com)

