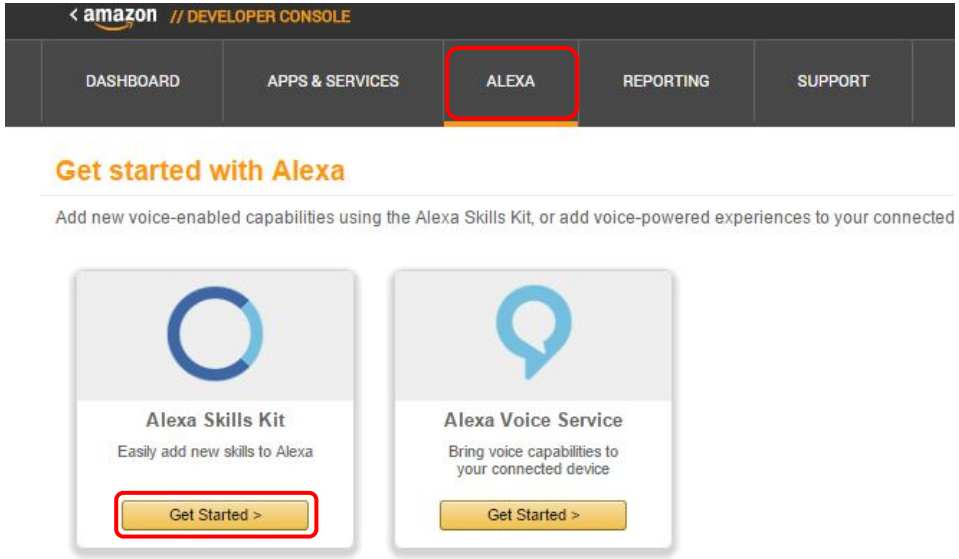
Creating a custom skill

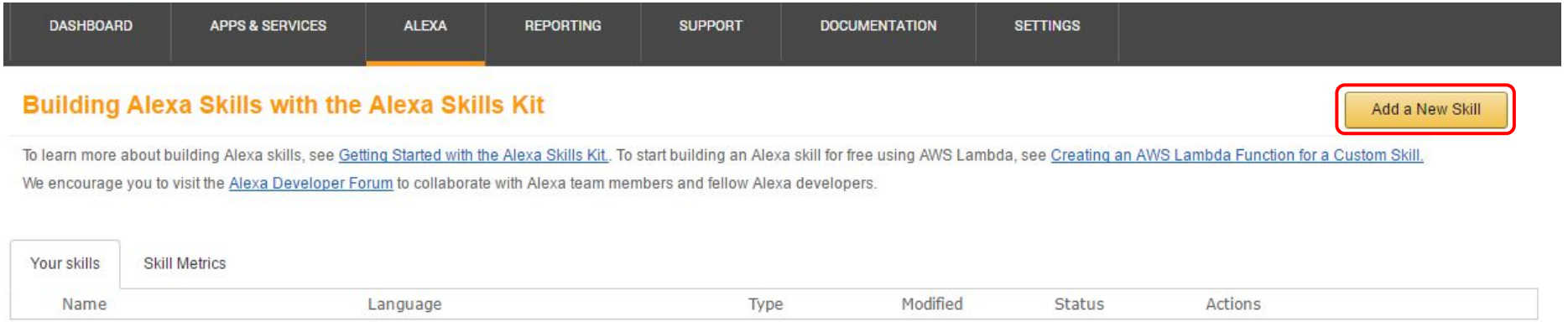
Amazon accounts you will need

- Amazon Developer Account:
  - To create your skill
  - Use this account to connect the Echo Dot
- Amazon AWS Account:
  - To host your code
  - Requires a credit card (it's free for the purpose of this workshop)
  - Don't have a credit card to create an account? Ask one of us, or ask if your neighbour can host your AWS function.

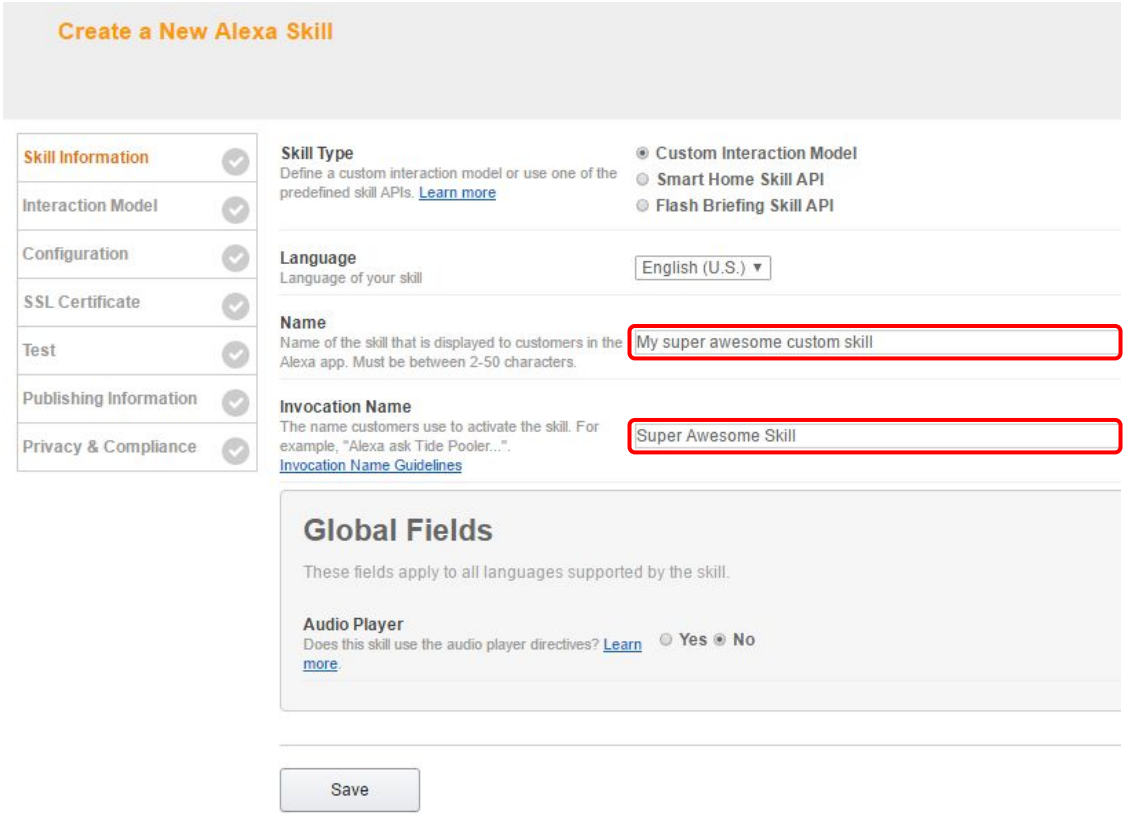


Click ‘Get Started >’ under Alexa Skills Kit

https://developer.amazon.com/home.html



Click ‘Add a New Skill’


Create a New Alexa Skill
Skill Information
Interaction Model
Configuration
SSL Certificate
Test
Publishing Information
Privacy & Compliance
Skill Type
Define a custom interaction model or use one of the predefined skill APIs. Learn more
Custom Interaction Model
Smart Home Skill API
Flash Briefing Skill API
Language
Language of your skill
English (U.S.)
Name
Name of the skill that is displayed to customers in the Alexa app. Must be between 2-50 characters.
My super awesome custom skill
Invocation Name
The name customers use to activate the skill. For example, "Alexa ask Tide Pooler...".
Invocation Name Guidelines
Super Awesome Skill
Global Fields
These fields apply to all languages supported by the skill.
Audio Player
Does this skill use the audio player directives? Learn more.
Yes
No
Save

Intent Schema

The schema of user intents in JSON format. For more information, see Intent Schema.
Also see built-in slots and built-in intents.

```
    {
      "intent": "MyFollowUpIntent",
      "slots": [
        {
          "name": "Greeting",
          "type": "LIST_OF_GREETINGS"
        }
      ]
    }
  ]
}
```

Custom Slot Types (Optional)

Custom slot types to be referenced by the Intent Schema and Sample Utterances. For general information about custom slots, see Custom Slot Types.

Type	Values		
LIST_OF_GREETINGS	Hello | Good day | What's up | WAZZZAAAAAAAAAA	Delete	Edit

Enter Type

LIST_OF_GREETINGS

Enter Values

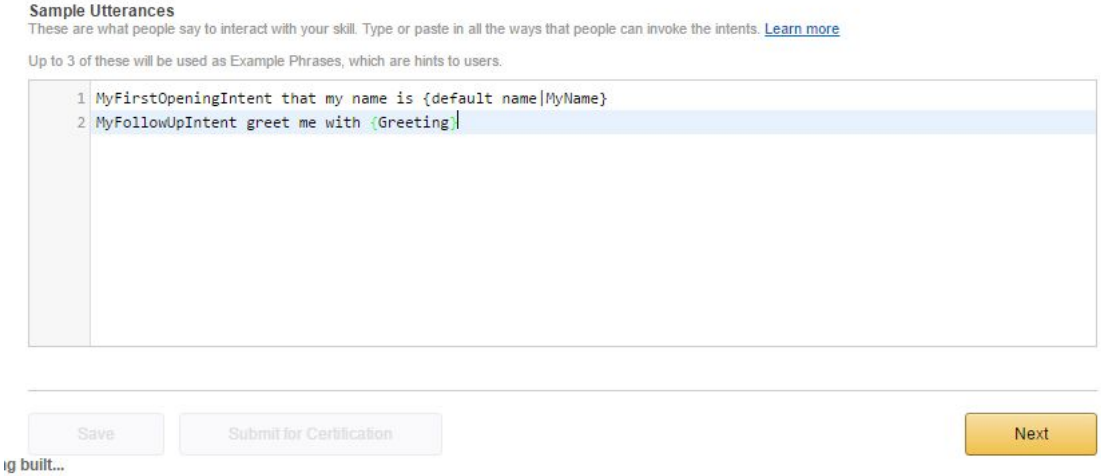
Values must be line-separated

```
Hello
Good day
What's up
WAZZZAAAAAAAAAA
```

Cancel | Update

```
{
 "intents": [
  {
   "intent": "MyFirstOpeningIntent",
   "slots": [
    {
     "name": "MyName",
     "type": "AMAZON.LITERAL"
    }
   ]
  },
  {
   "intent": "MyFollowUpIntent",
   "slots": [
    {
     "name": "Greeting",
     "type": "LIST_OF_GREETINGS"
    }
   ]
  }
 ]
}
```

Looking for a specific type? https://developer.amazon.com/public/solutions/alexa/alexa-skills-kit/docs/built-in-intent-ref/slot-type-reference



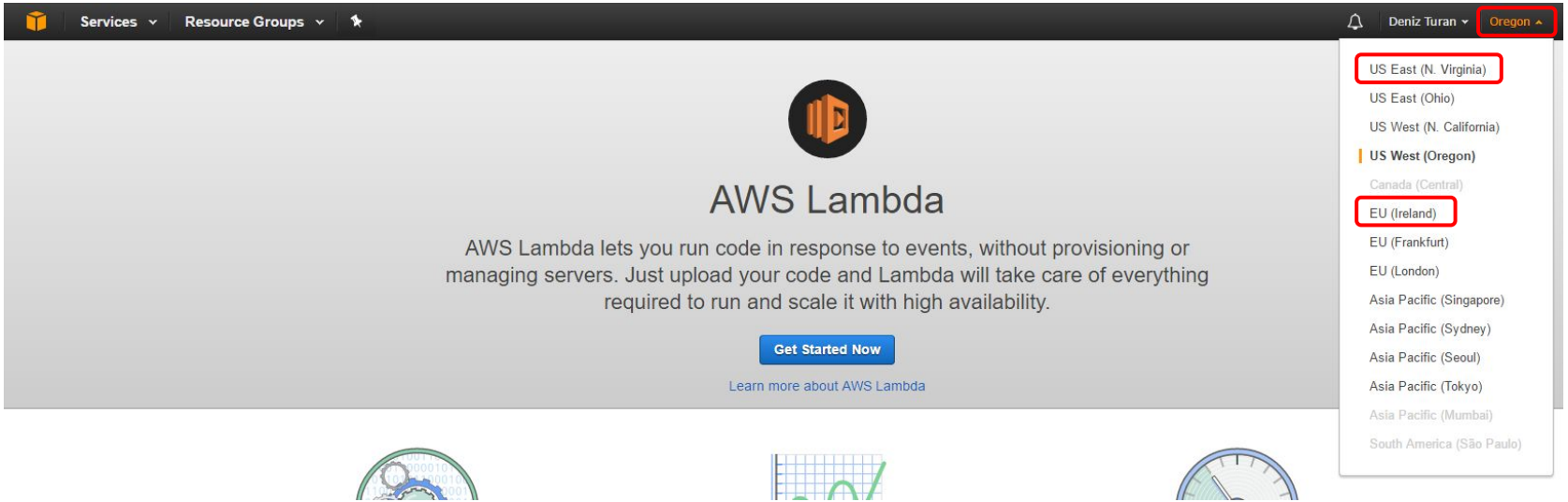
Each line of a sample utterances file consists of two fields separated by tabs or spaces:

- The name of the intent on the left.
- The phrase a user might speak to signal that intent on the right.

Type AMAZON.LITERAL requires a default slot value.
Other available types:
https://developer.amazon.com/public/solutions/alexa/alexa-skills-kit/docs/built-in-intent-ref/slot-type-reference

Now we need a lambda function

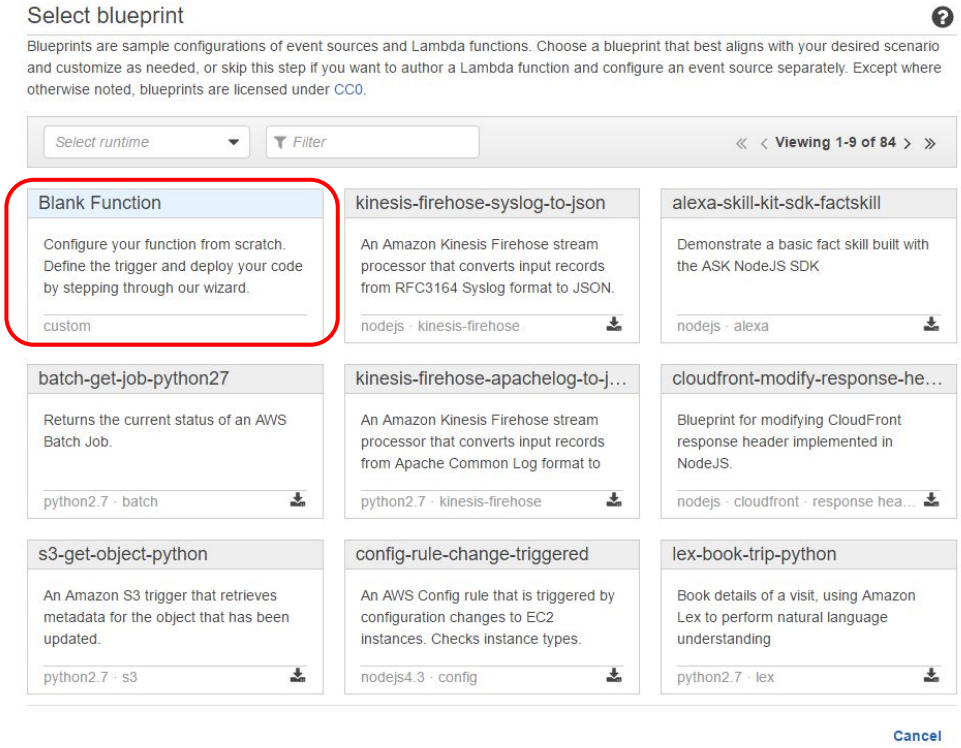
Or check out http://stackoverflow.com/a/40668109/2977399 to create your own server with spring boot



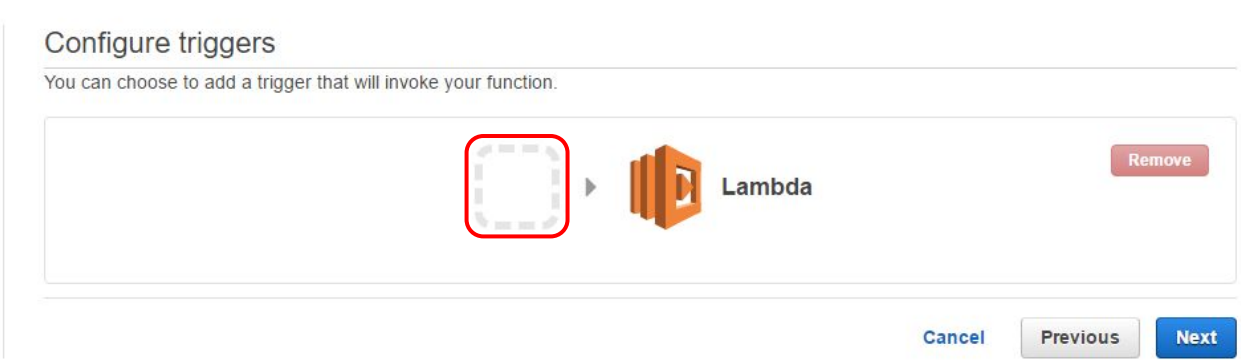
Select **US East (N. Virginia)** or **EU (Ireland)** then click 'Get Started Now'

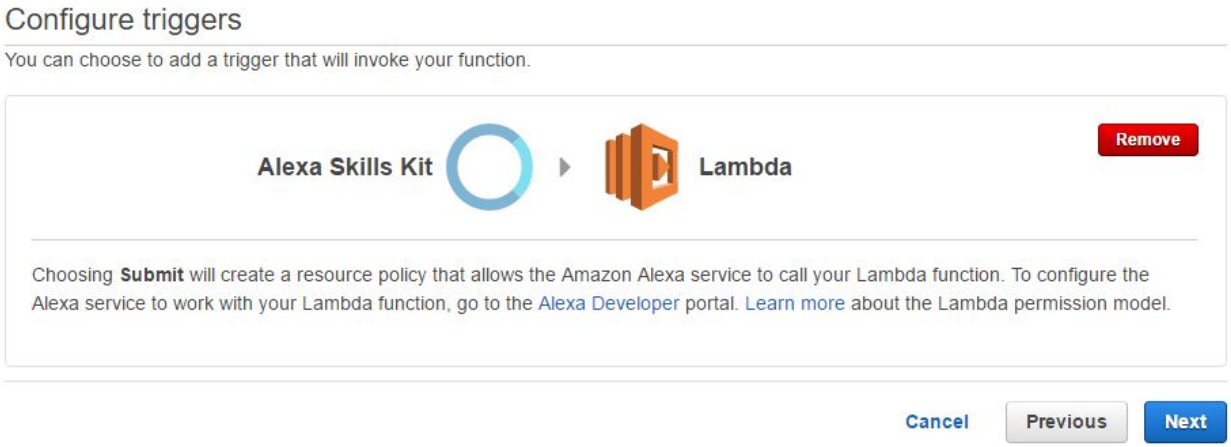
Alexa doesn't work with other regions

https://console.aws.amazon.com/lambda/home

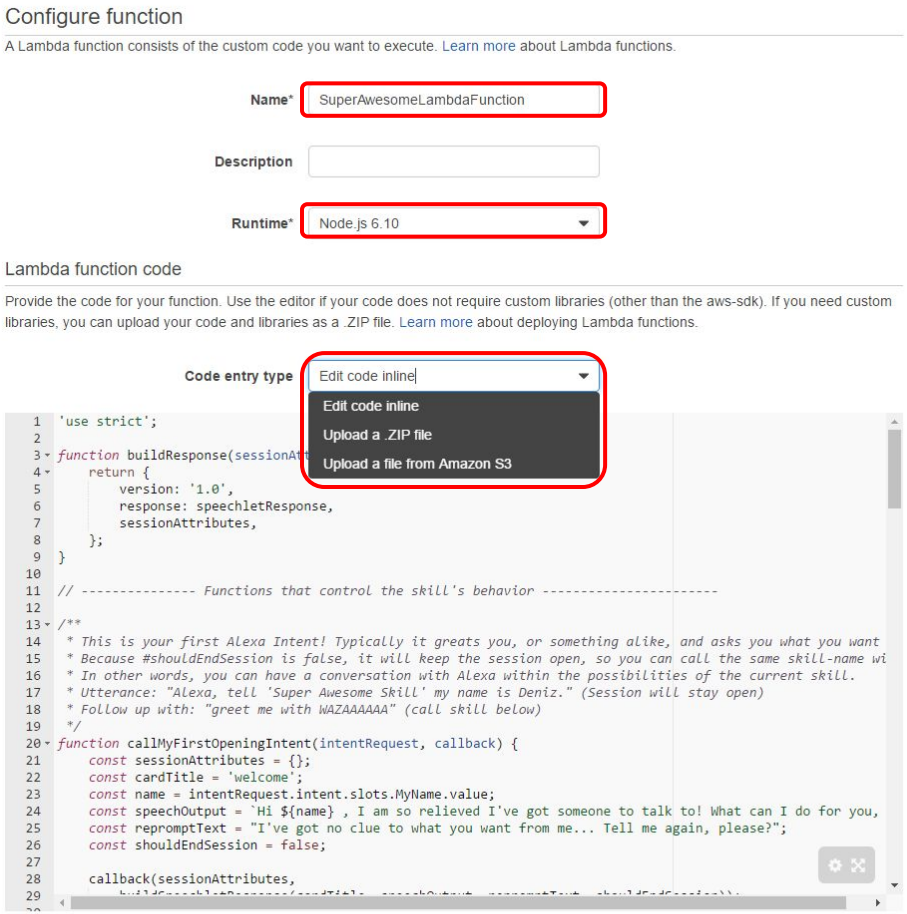


Select ‘Blank Function’





Select Alexa Skills Kit as a trigger.



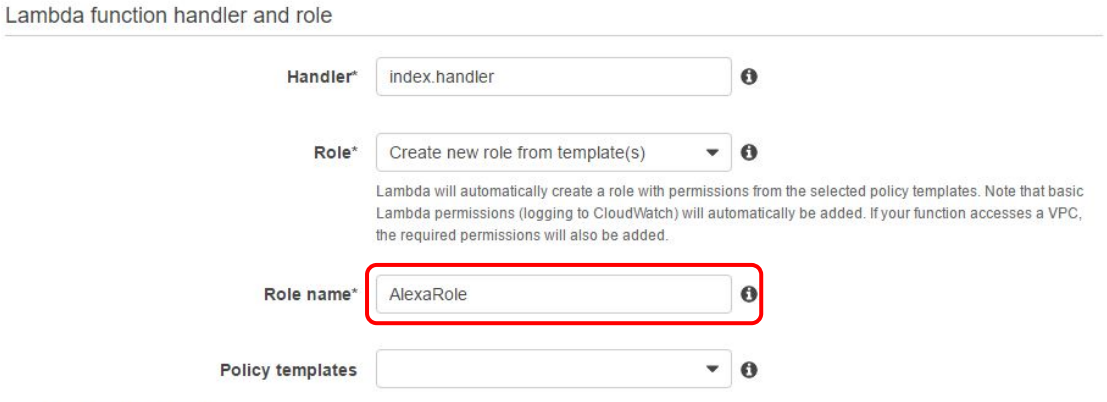
You can also choose a different runtime here if you want to use a different language

Choose ‘Upload a .ZIP file’ if you want to include node dependencies.

The ZIP file should look like this:

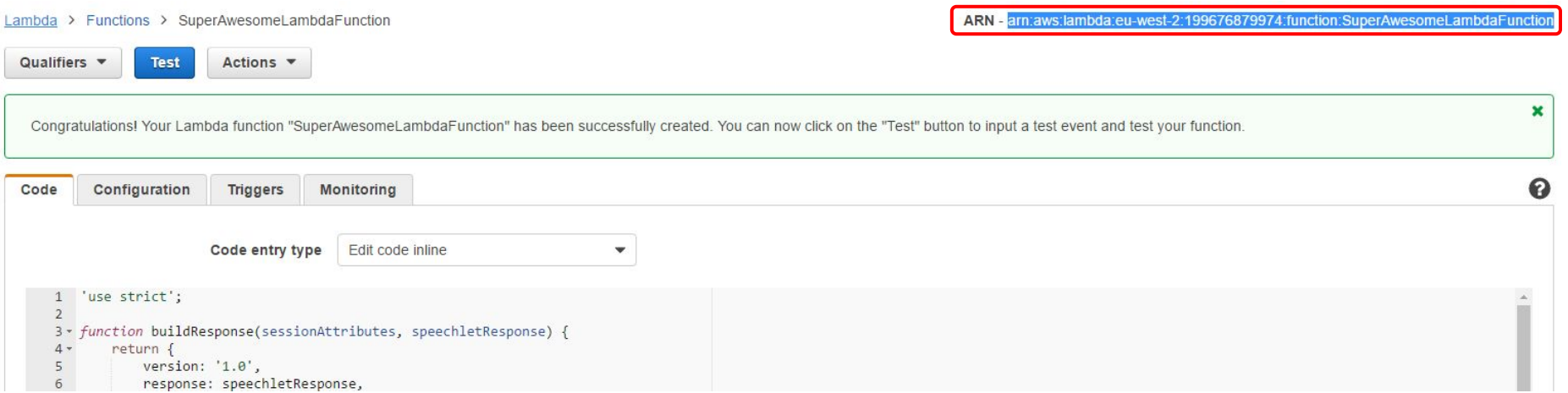
- /node_modules
- /index.js

You can copy the example code ‘example-index.js’ in the workshop repository, or write your own code. There is also an example in Java in the repository.

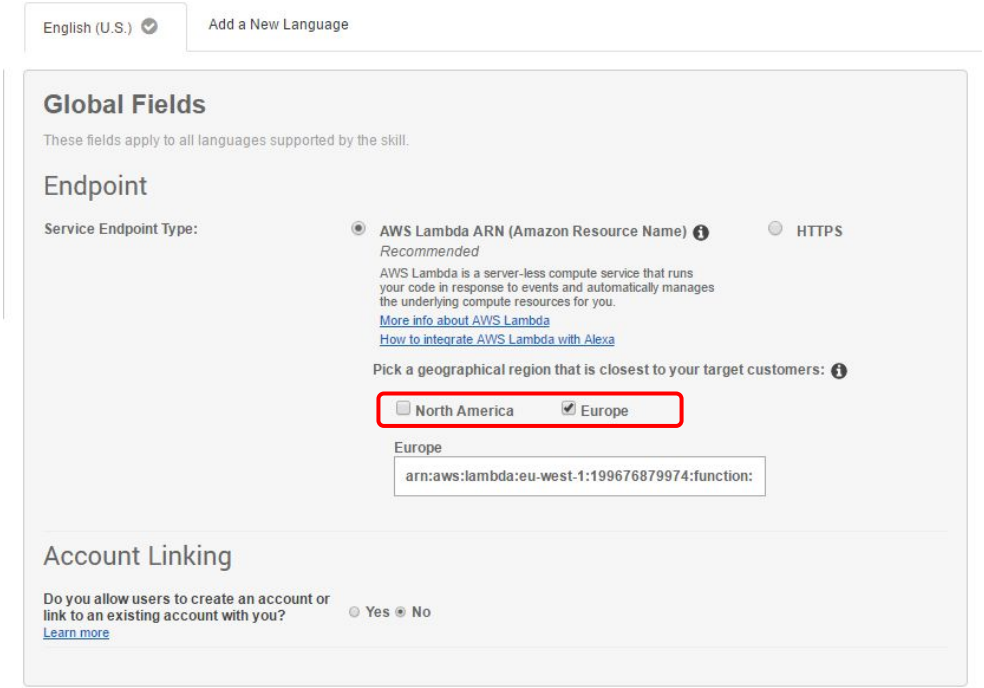


Handler: The module-name.export value in your function. For example, "index.handler" would call exports.handler in index.js.

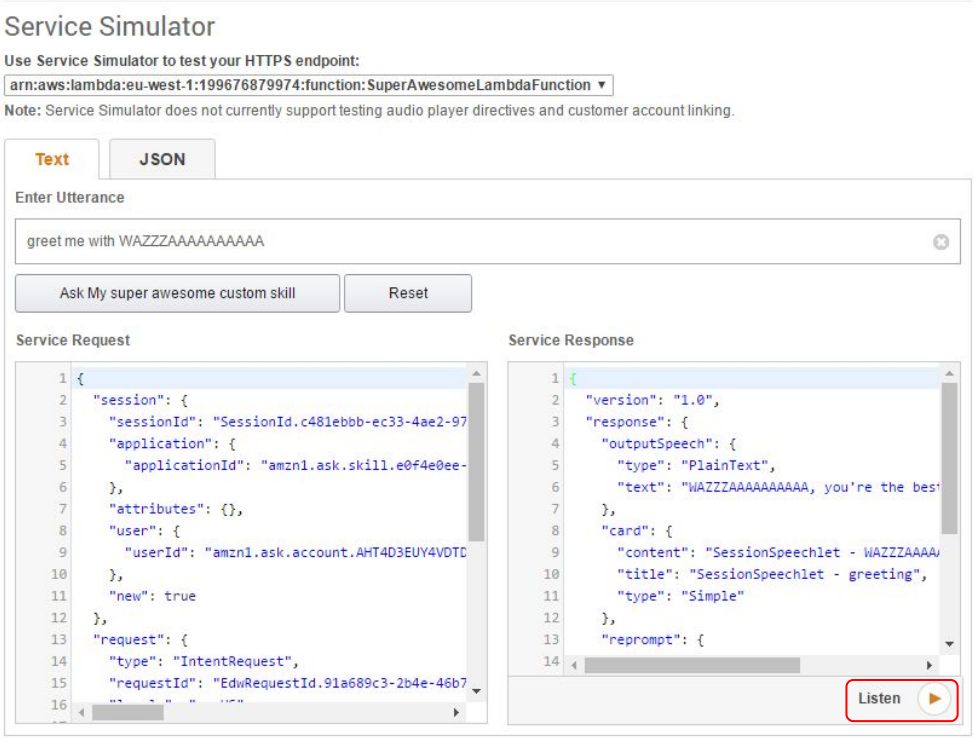
Role: The role for your function. Just create a new one, it's used for permissions that a function has, which you can re-use in other functions.



After you have created the function, copy the ARN, and go back to the developer console



Select either Europe or North America, depending on where you created the lambda function, then paste the ARN.



Test your skill.

You can skip the steps ‘Publishing Information’ and ‘Privacy & Compliance’. Those are only needed if you wish to publish your skill. When skipped, your skill will have the status ‘in development’.

Your Amazon Echo will automatically use all the skills on your account. Including the ones that are in development.

Stay awhile and listen.

Test your skill with the Echo Dot

- Take an available Echo Dot
- Press and hold the Microphone off and Volume down buttons at the same time until the light ring turns orange (about 20 seconds).
  - Then light ring turns blue.
  - Wait for the light ring to turn off and on again.
  - The light ring then turns orange again, and your Echo Dot enters setup mode.
- Browse to https://alexa.amazon.com -> Settings -> Set up a new Device to connect your device to the Wi-Fi network (network name is on the post-it) and register it to your Amazon account.
- Call Alexa

"Alexa, tell *Super Awesome Skill* that my name is *Chiel*." [1]

[1] Hopefully your name is John, because Alexa thinks I'm a very **chill** person.