<u>3. How to Create Alexa Skill</u>

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Click **Get Started** under **Alexa Skills Kit**.

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Click Add a New Skill.

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Create a New Alexa	Skill		
Skill Information	Skill Type Define a custom interaction model or use one of the OCustom Interaction Model		
Interaction Model	predefined skill APIs. Learn more Skill API Flash Briefing Skill API		
Configuration	O Video Skill API		
SSL Certificate	Language of your skill English (U.S.) V		
Test C	Name Name of the skill that is displayed to customers in AlexaLEDSkill		
Privacy & Compliance	the Alexa app. Must be between 2-50 characters.		
	Invocation Name The name customers use to activate the skill. For [minnowboard example, "Alexa ask Tide Pooler".		
	For successful Alexa Skills Certification, please review and follow our <u>Invocation Name Guidelines</u> as well as our <u>Certification Requ</u>	irements.	
2,5			
· (*)	Global Fields These fields apply to all languages supported by the skill		
	Audio Pays Does this skill use the audio player directives? Yes No Learninoze		
	Video App Does this skill use the video app directives? Learn Yes 🛇 No		
	Render Template Does this skill use the Render Template directives? Yes No Learn more		
	Save		

Give the skill a Name and an Invocation Name. The Invocation Name is the name that you'll refer to the skill as when talking to Alexa. (e.g. Alexa, tell minnowboard to ...).

Click **Save** and then **Next**.

For **Intent Schema**, copy and paste the following code:

```
{
 "intents": [
  {
   "slots": [
    {
     "name": "DeviceState",
     "type": "Device_States"
    }
   ],
   "intent": "DeviceStateIntent"
  },
  {
   "intent": "AMAZON.RepeatIntent"
  },
  {
   "intent": "AMAZON.HelpIntent"
  },
  {
   "intent": "AMAZON.StopIntent"
  },
  {
   "intent": "AMAZON.CancelIntent"
  }
]
}
```

For Custom Slot Types:

Type: Device_States **Values:** on off

And then click Add

For Sample Utterances:

DeviceStateIntent turn L E D {DeviceState}

Click Save. Saving will take a moment. Then click Next.

On the next page, you will be asked for an endpoint. Choose **AWS Lambda ARN (Amazon Resource Name).**

Go back to your lambda function that you created in the previous tutorial, and copy the ARN, which should be in the upper right hand corner.

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Go back to the page on developer.amazon.com where you created the Alexa Skill, under the Configuration tab where it asks for the Endpoint:

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	? Minnowb ✓ Custom ID: amm1.ask	ard-Skili ass9994-4295-4479-40848398191	
		English (U.S.) 🛇 Add a New Language	
A	Skill Information	Global Fields	
a	Interaction Model 📀	These fields apply to all languages supported by the skill.	
	Configuration	Endpoint	
1	Test 📀	Service Endpoint Type: O AWS Lambda ARN (Amazon Resource Name) O HTTPS	
▶_	Privacy & Compliance	AWS Lambda is a server-less compute service that runs your code in response to events and automatically	
		manages the underlying computer resources for you. More info about AWS Lambda Hory to interact Re-Was Lambda with Alexa	
	Skills Beta Testing New	Pick a geographical region that is closest to your target customers:	
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		North America	
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Pick your geographical region, and paste the ARN. Then click **Next.**

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		Voice Simulator		
		Hear how Alexa will speak a response entered in plain text or SSML. Learn For example: Here is a word spelled out: <sav-as "septimization":="" "sessionid":="" "sessionid.35036695-d3a6-408a-="" 3="" <="" interpret-as="spell-out>h</td><td>more about supported SSML tags,
ello</sav-as>.</td><td></td></tr><tr><td></td><td></td><td></td><td>Listen 🕨</td><td></td></tr><tr><td></td><td></td><td>Service Simulator</td><td></td><td></td></tr><tr><td></td><td></td><td>Use Service Simulator to test your lambda function: arn:aws:lambda:</td><td>us-east-1:309843583402:function:minnowboard_LED v</td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td>a,</td><td></td><td>Text JSON</td><td></td><td></td></tr><tr><td></td><td></td><td>Enter Utterance</td><td></td><td></td></tr><tr><td></td><td></td><td>turn L E D off</td><td>8</td><td></td></tr><tr><td>>_</td><td></td><td>Ask Minnowboard-Skill Reset</td><td></td><td></td></tr><tr><td>A</td><td></td><td>Lambda Request</td><td>Lambda Response</td><td></td></tr><tr><td></td><td></td><td>1 { 2 " session":="" td="" {=""><td>1 { 2 "version": "1.0", 3 "response": { 4 "outputsback": {</td><td></td></sav-as>	1 { 2 "version": "1.0", 3 "response": { 4 "outputsback": {	
		<pre>'applicationId': "anznl.ask.skill.6399a54 ' ' 'satributes': {}, 'user1'd': "anznl.ask.account.AGNG5AM02H0 ' 'new': false ' 'request': { 'request': { 'request': { 'request': false 'syse': intentRequest', 'requestId.eds528cl-5cd2-43 'locale': "en-US',</pre>	<pre>5 'type": "Systa". 6 'type": "Systaw The LED is off. 7 }, 8 'speechletResponse: { 10 'sublt "systaw": { 10 'sublt "systaw": the LED is off. 11 }, 12 'shouldEndSesion": true 13 } 14 } Listen •</pre>	
		Echo Show Render Response (beta)		

Now, you can try the simulator to check for the correct Lambda Response.

How to Communicate with your Device

In order to actually communicate with your Thing, though, use main.js, which is included in the image. In main.js, update keyPath and certPath to the certificate names on your device, and replace host with the endpoint from the AWS IoT Device Interact Dashboard, and replace the device.subscribe with your thing shadow/update/accepted. Run node main.js. It will say connect once it is connected. You can then use the skill's service simulator to either turn your minnowboard's LED on or off.

To actually talk to your advice, run AlexaPi in the background with the following command:

python /opt/AlexaPi/src/main.py &

Then, run node main.js. Again, it will say connect once it is connected.

You can now say, "Alexa, tell minnowboard to turn LED on."