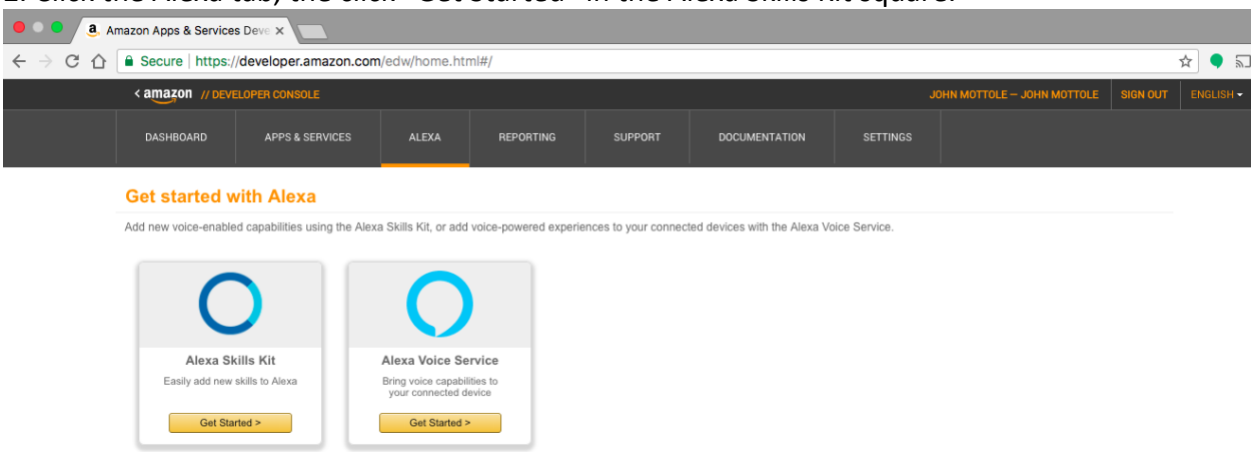
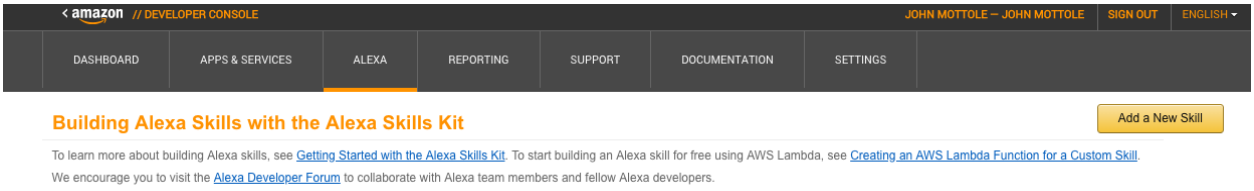
# Creating your first Alexa Skill Tutorial
# Stevens Software Engineering Club

1. First you need to create an Amazon account. Go to developer.amazon.com and create an Amazon account if you don't already have one. Once signed up, go to the developer console by clicking "Developer Console" in the top right corner.

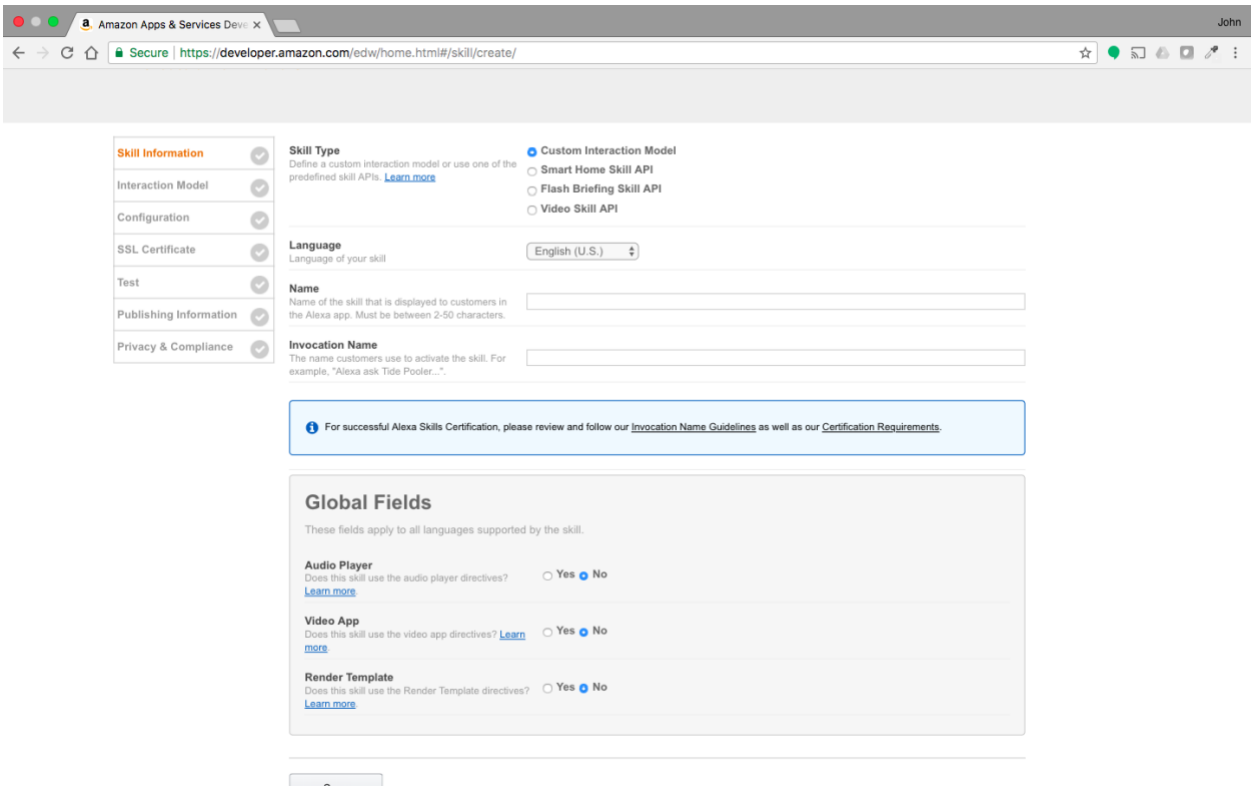

2. Click the Alexa tab, the click "Get Started" in the Alexa Skills Kit square.



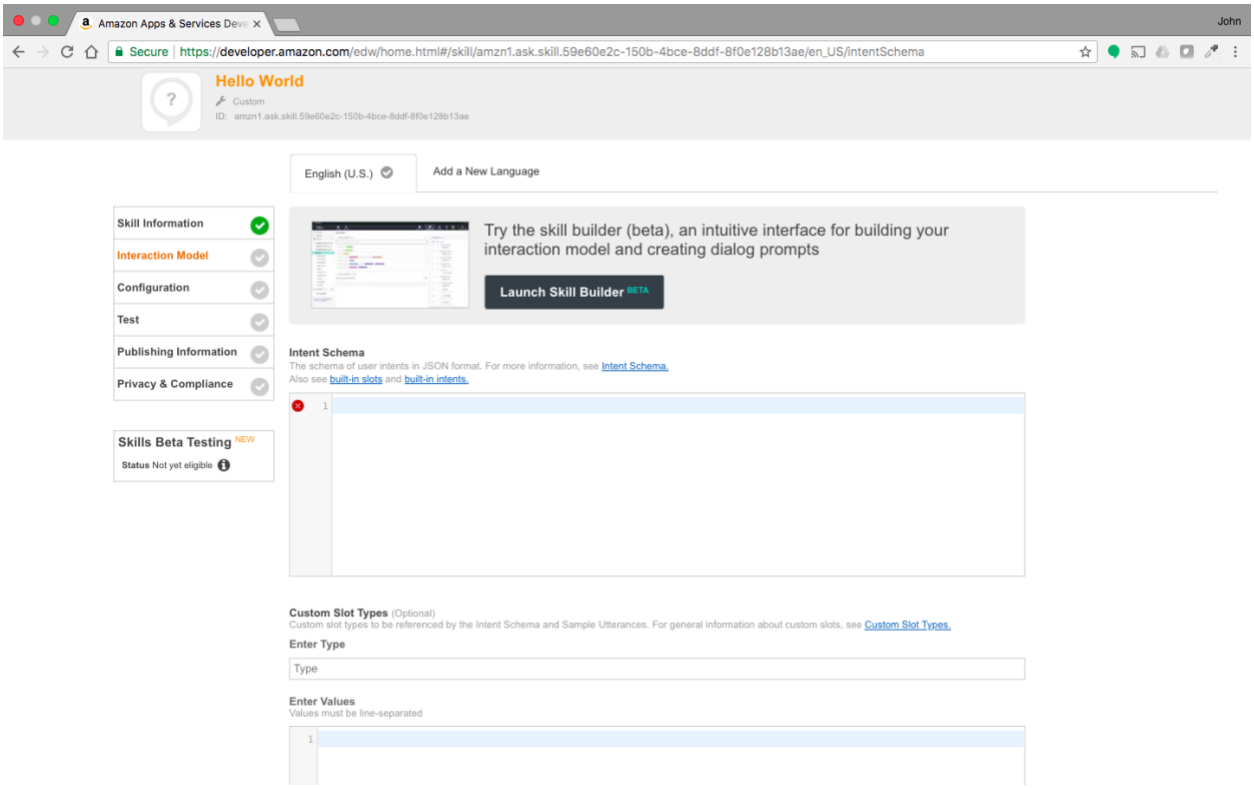
3. Click “Add a New Skill” to create a new skill



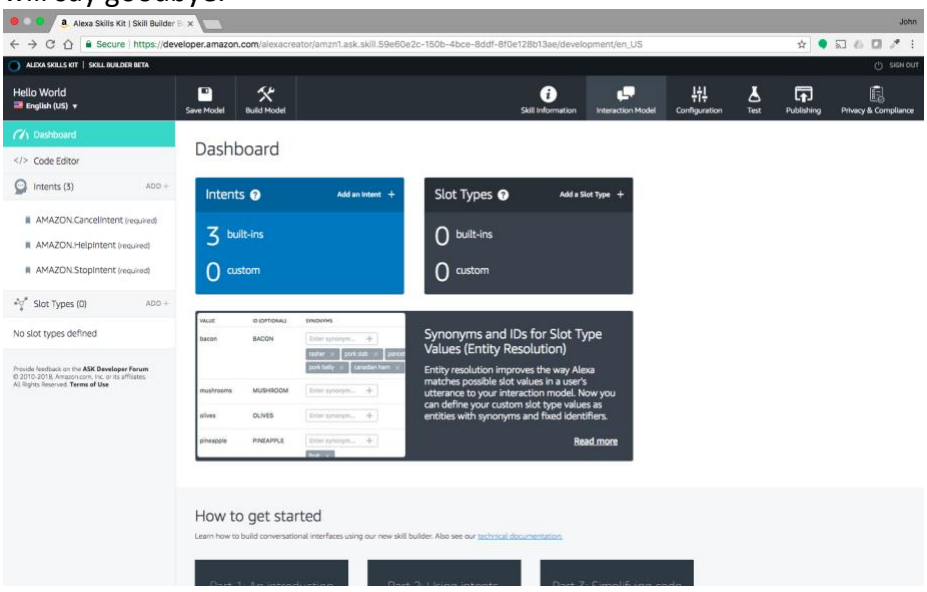

4. This is where we will set up our new skill. On this page we can keep most of the settings the way they are, we just need to give it a name and an invocation name. The name will be the offical name in the Alexa Skills Store. The innvocation name is the name that you will use when talking to Alexa. We are going to put “Hello World” for both of these. Hit save and click on the Interaction Model tab.



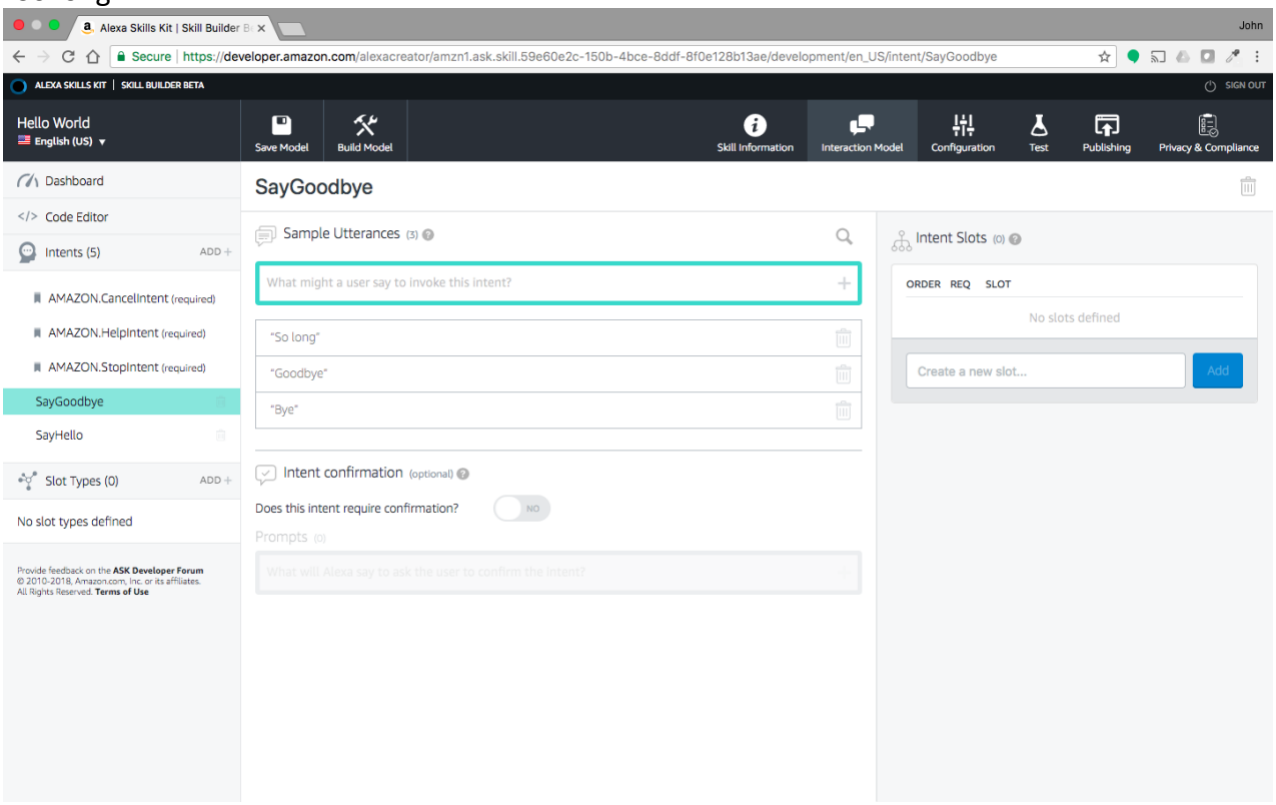
5. Right now the skill builder is in beta mode but will be the standard soon, it is stable enough to use so we will build our skill in this. Click “Launch Skill Builder”.



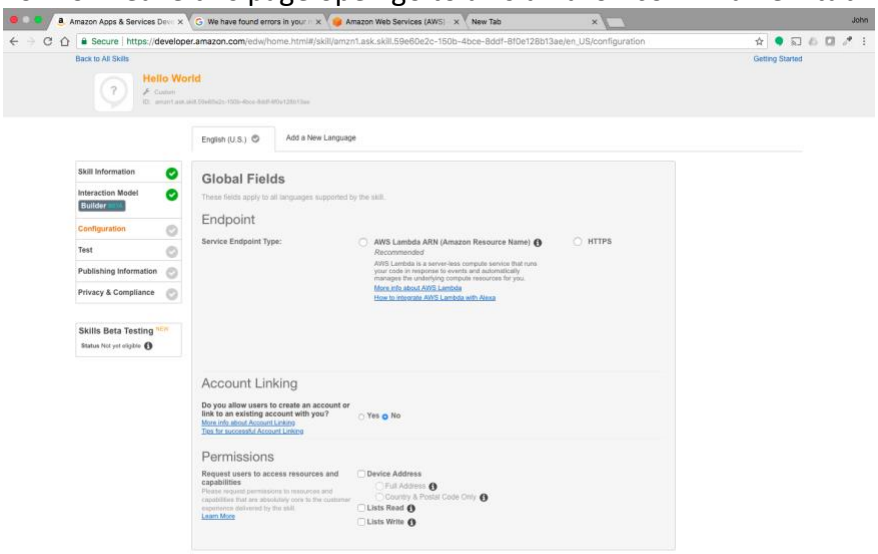

4. On the left side of the skill builder is our intents. Intents can be thought of as functions. They are different actions that users tell your skill to do. Right now there are 3 that are pre-defined by Amazon. We are going to add to add two more, one that has our skill say hello and one that will say goodbye.



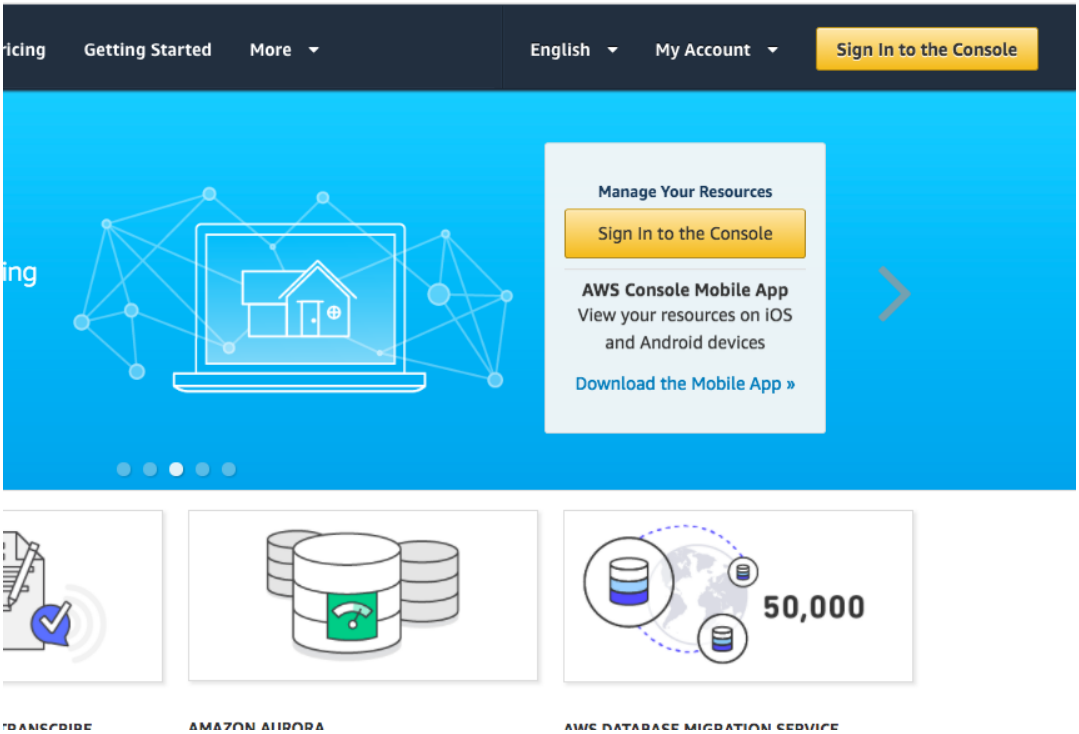
5. Click “Add an intent” on the dark blue Intent box. Name this one “SayHello” with no spaces and click create. We now have to enter sample utterances. These are potential things that users could say to our skill to make Alexa do something. Type “Hi” in the box and press enter. This will add an utterance. People say hi in more than one way, so let’s repeat this with “hello” and “what’s up”. Now that we defined our “SayHello” intent, lets create one for Alexa to say goodbye. Click the “Add” button on the Intents section on the left and repeat the process, this time call it “SayGoodbye” and make the sample utterances things like, “Bye”, “Goodbye” and “So long”.



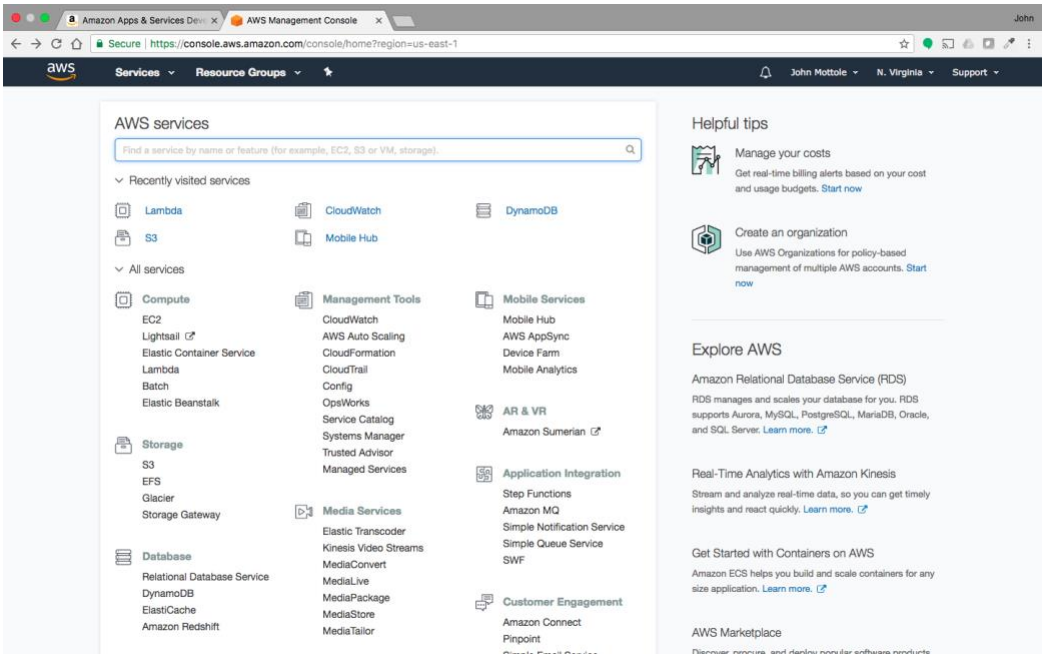
6. Now let's save and build our model that we have just created. Click the "Save Model" button on the top then press "Build Model". This will take a little while, do not refresh the page. Once the build is completed, click on the configuration tab towards the top right corner. We cannot complete this page until we have a Lambda function set up in Amazon Web Services (AWS). The lambda function will act as the logic behind our skill that will tell Alexa what to say to the user. For now leave this page open go to aws.amazon.com in a new tab.



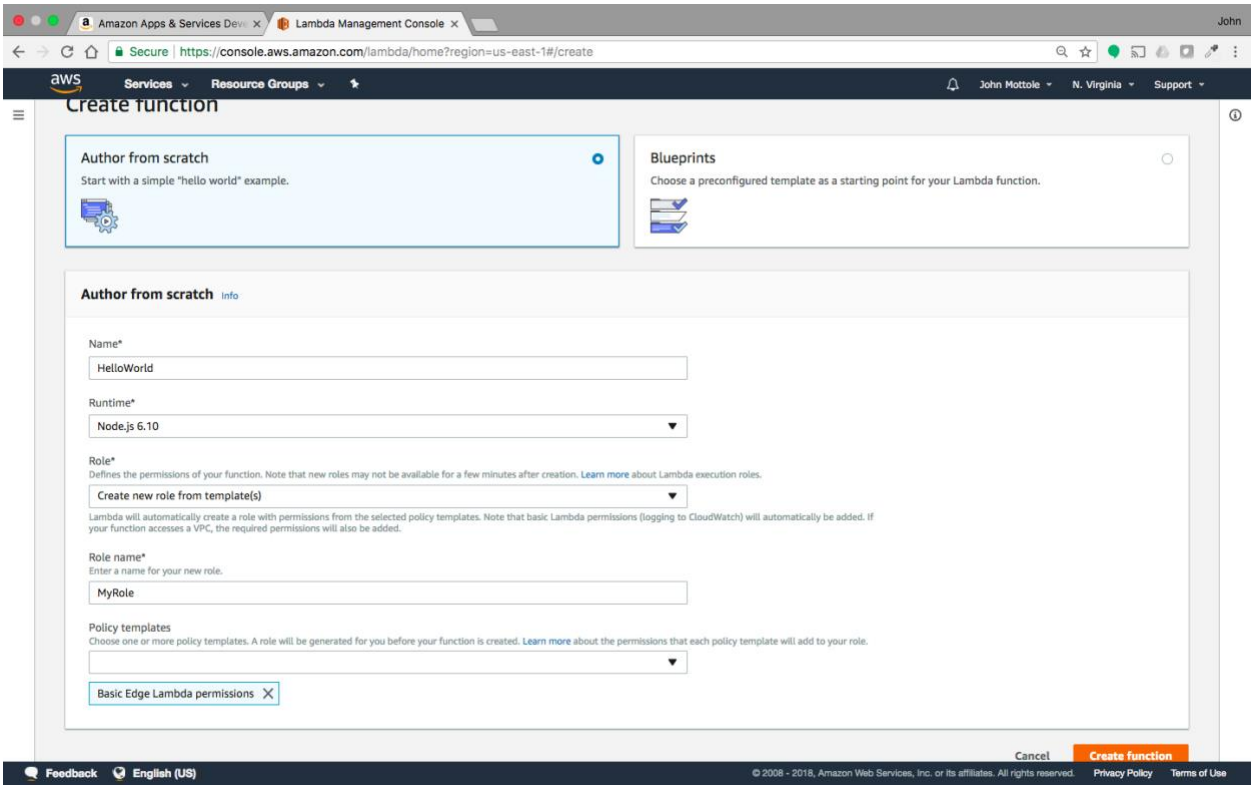

7. If you do not have an AWS account, sign up for one. It is a different from an Amazon account. Once logged in, click "Sign in to the console".



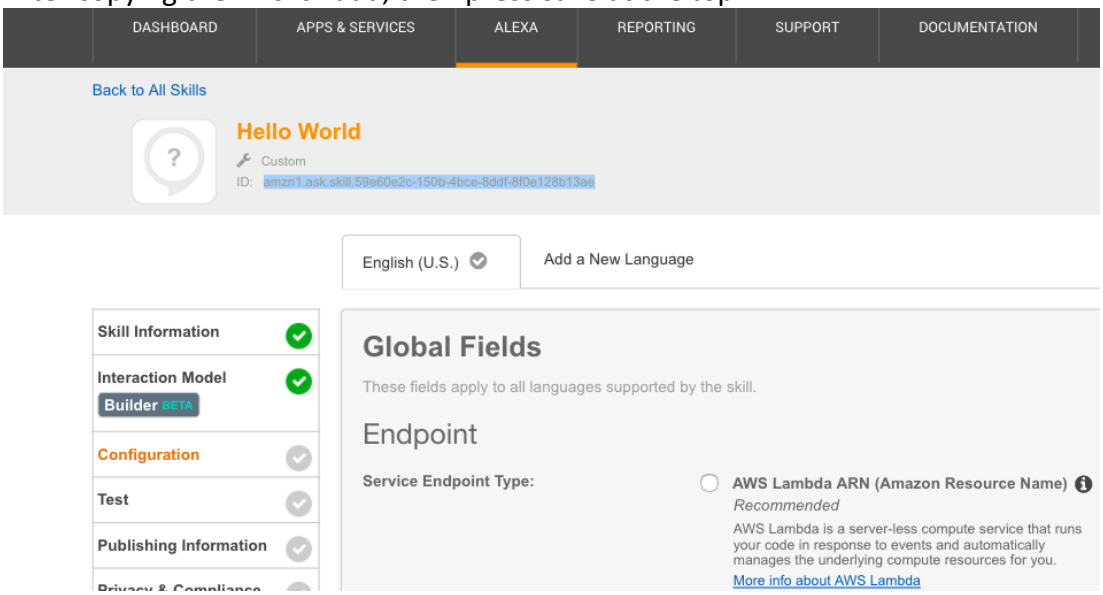
8. This will bring you to list of all the services that AWS offers. At the top right corner, next to your name, there should be a location. Click the drop down and change it to N.Virgina. Under the compute section click Lambda.

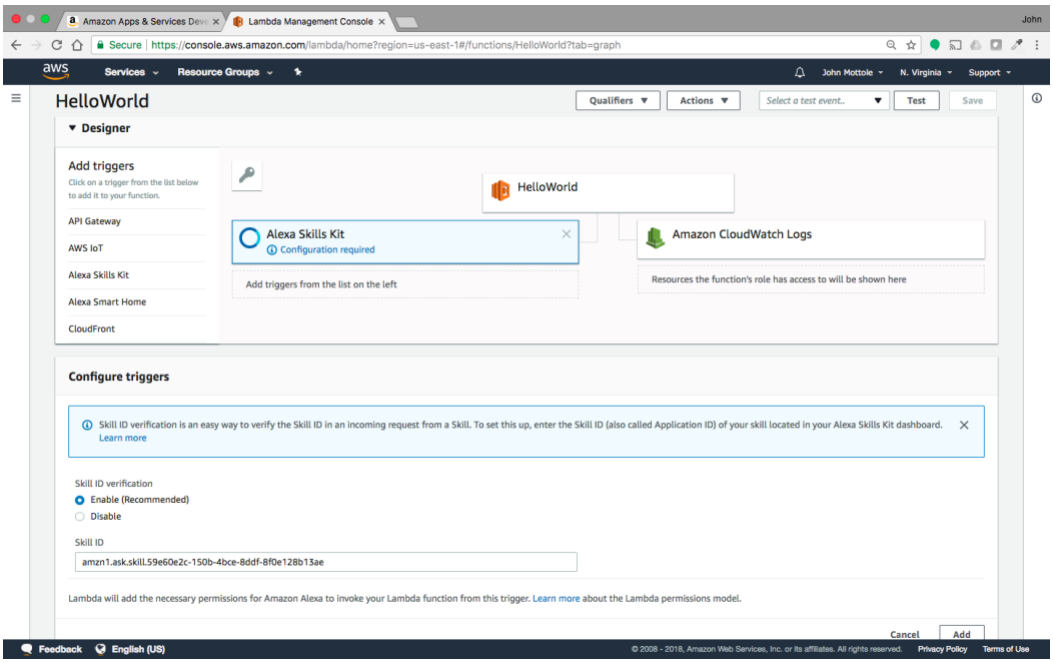


9. Click the orange create function button to create our lambda function. We can name this HelloWorld. For runtime leave it as Node.js 6.10. For role choose “Create a new role from template”, make the role name “MyRole” and for policy templates choose “Basic Edge Lambda Permissions”. Click “Create Function” when done.

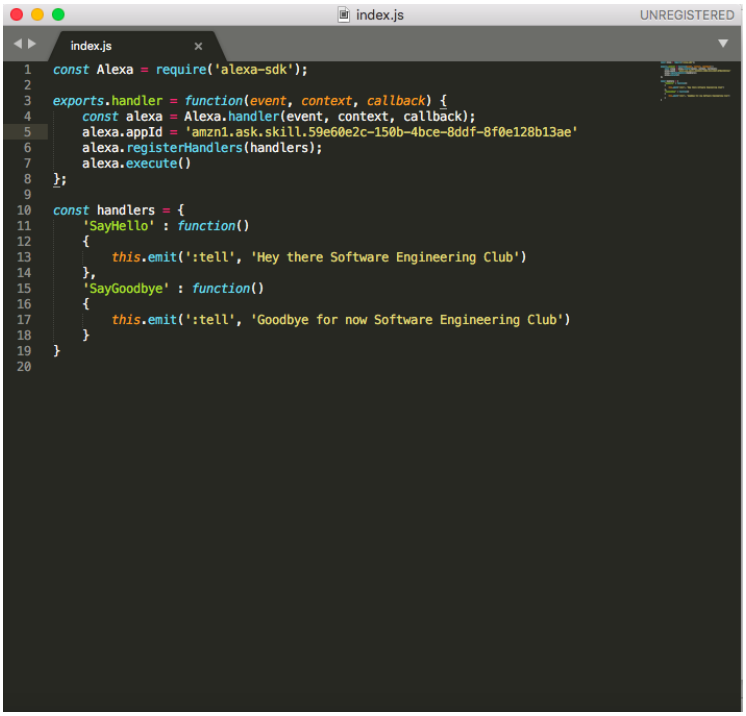



10. On the left side under Add Triggers, click “Alexa Skills Kit”. It will ask you for a skill ID. This is from your Alexa developer page. The ID can be found under the name of the skill (Hello World). After copying the ID click add, then press save at the top.

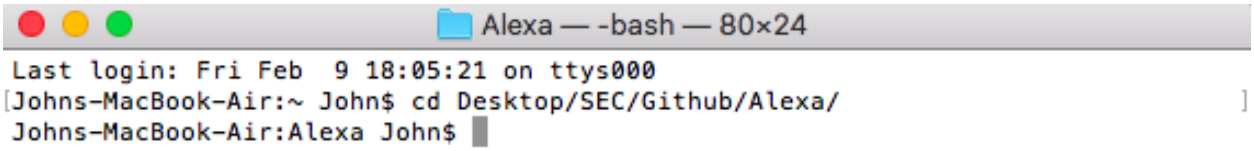




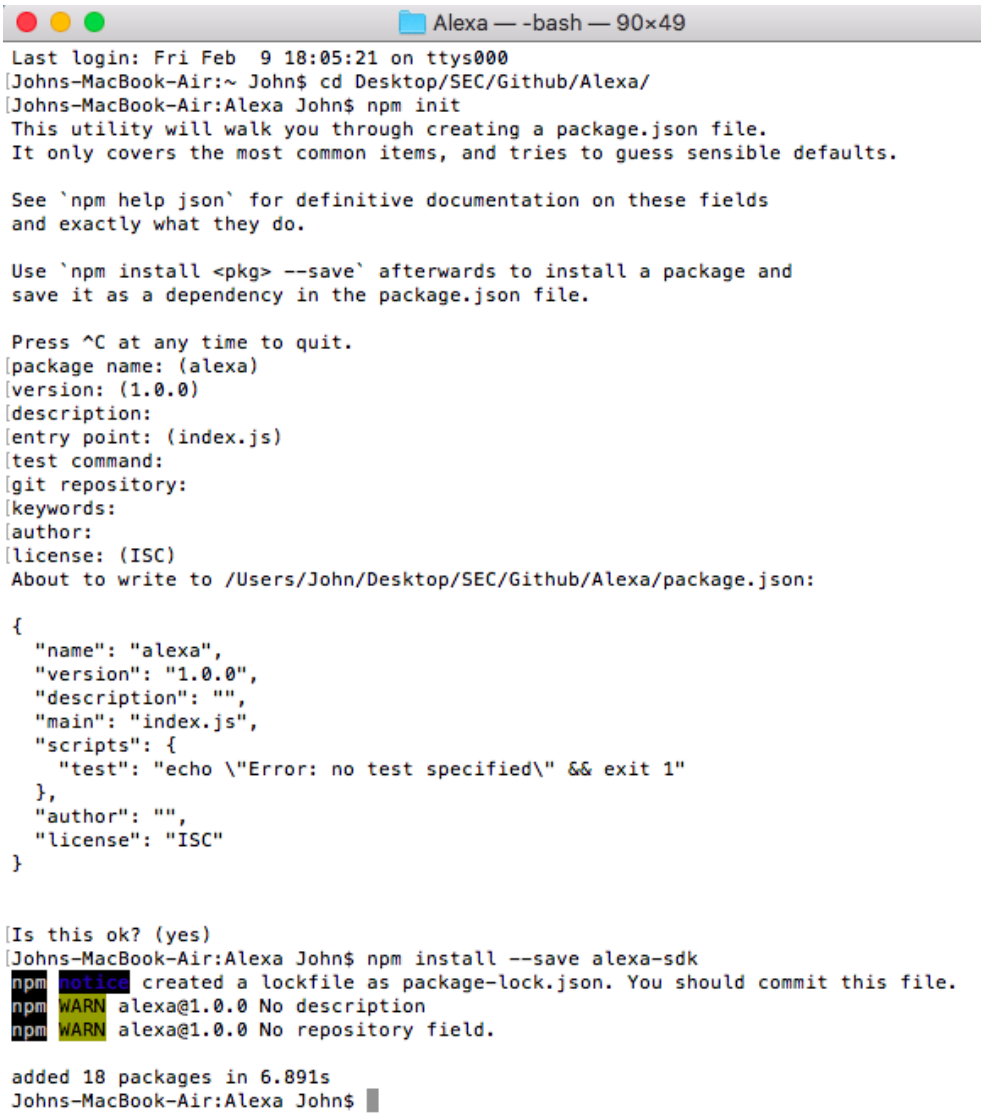

11. Click on the white “HelloWorld” rectangle on the tree, this will bring us back to the code of our function. There is the ability to write code for lambda functions directly in the browser but for this we will writing code in a text editor and zipping it up to send to AWS. To start create a folder for this project. Open your favorite text editor and copy the code in the index.js file on our github. You will need to change the appId located on line 5 to the same ID that you copy and pasted in step 10. The names of the functions in the handlers, ‘SayHello’ and ‘SayGoodbye’, can stay the same as long as you used the ‘SayHello’ and ‘SayGoodbye’ intent names from step 5.



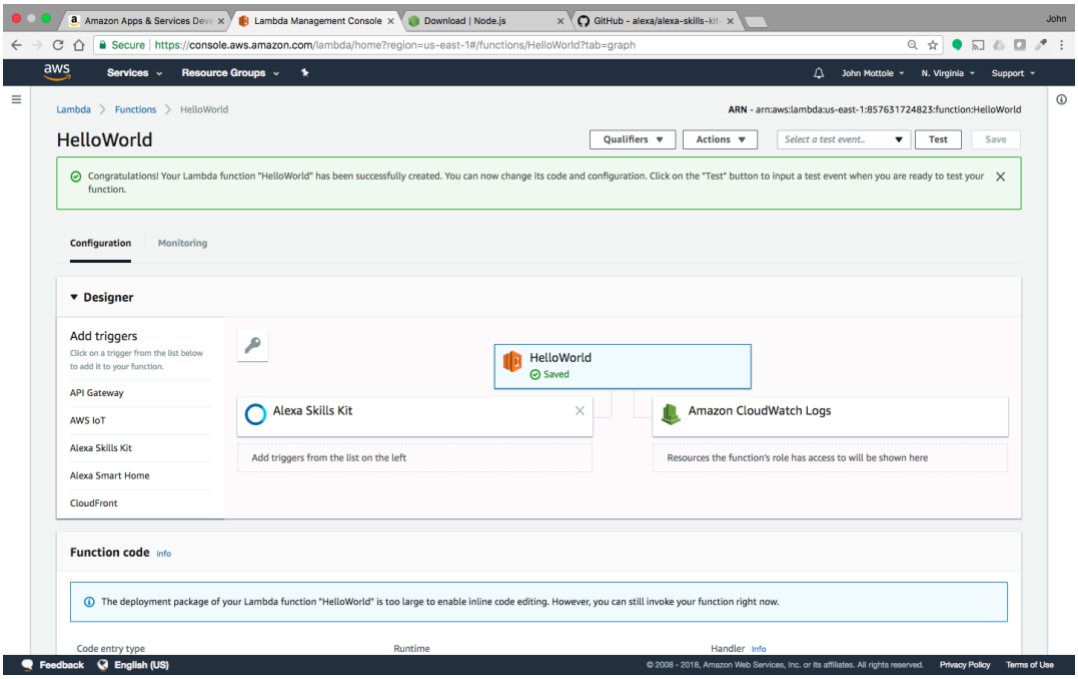
12. Save this file as “index.js” in your project folder. Open up a terminal and change the directory to your folder. My folder is in Desktop/SEC/Github/Alexa, so to change directories in the terminal I’m going to write “cd Desktop/SEC/Github/Alexa”. The next step will require Node JS, if you do not have it you can install it at [https://nodejs.org/en/download/](https://nodejs.org/en/download/).



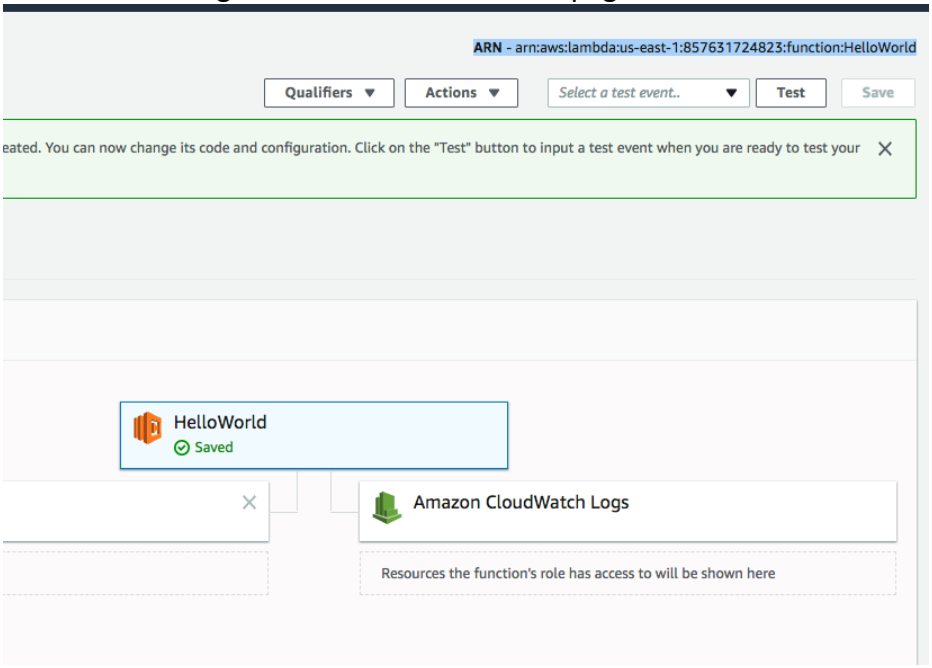

13. Type “npm init” into terminal, keep pressing enter to accept the suggestions from npm. After npm asks if everything is ok and you have pressed enter, type “npm install --save alexa-sdk”.



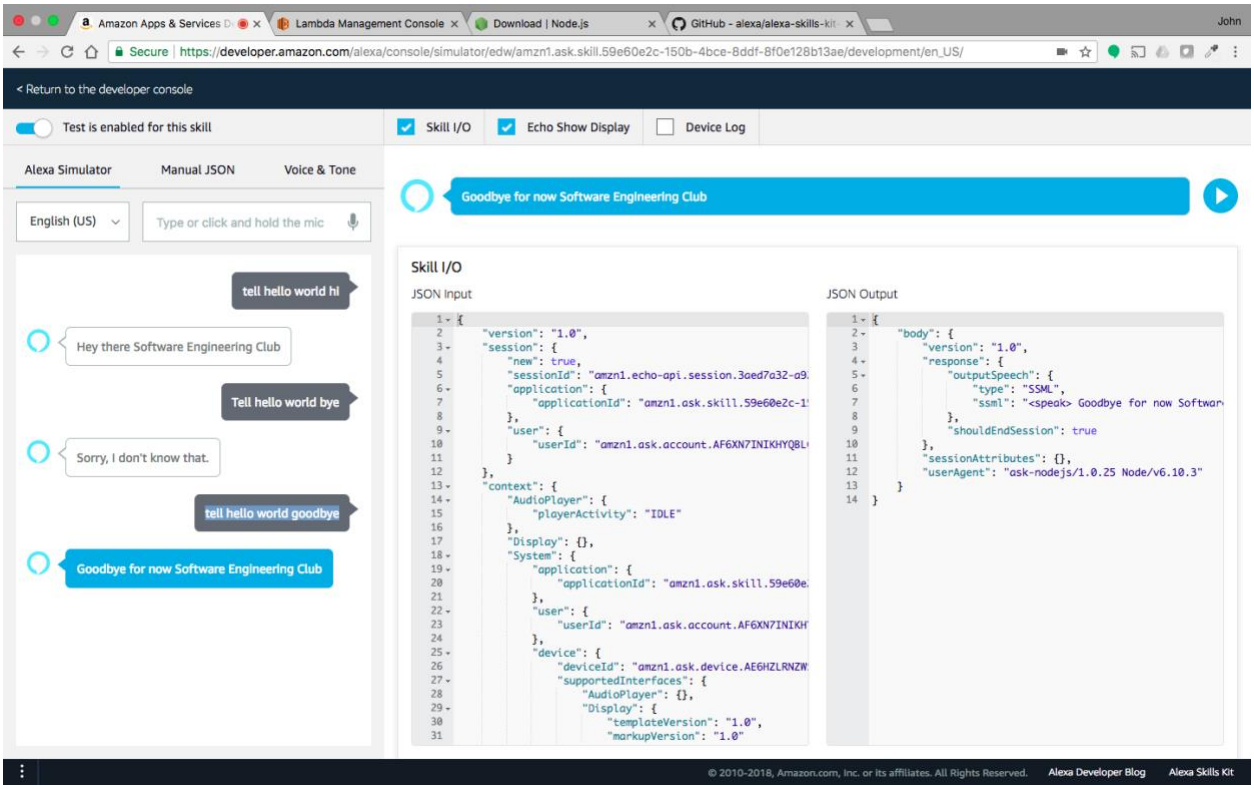
14. Zip up the index.js file, package.json file and node_modules folder. Do not zip up the entire project folder, you will need to highlight these 3 files and zip them. After you have your zip file go back to AWS and choose “Upload a .Zip file” under the “Code entry type” drop down in the “Function code” block. Click the upload button and select your zip file. Click save on the top right corner.




15. Our lambda function is now ready. Go back to the Alexa developer page for your skill and make sure you are on the configuration tab. Choose AWS Lambda RN and enter the ARN located on the right of the lambda function page. Press next when this is filled out.



16. In the test section select “Go To Test Simulator” to test your skill. Type “Tell Hello World hi”, if everything worked it should say “Hey there Software Engineering Club”. Type “tell hello world goodbye” and it should say “Goodbye for now Software Engineering Club”. If you have an Alexa device registered with your Amazon account, your new skill will automatically be enabled on your device.




This is only the surface of what Alexa can do. There are a lot of resources online with all of the things that can be done with Alexa. [https://github.com/alexa/alexa-skills-kit-sdk-for-nodejs](https://github.com/alexa/alexa-skills-kit-sdk-for-nodejs) is a good start for using the Alexa SDK.