



Conversational AI with Alexa v2: Testing Skills

In this sheet, we're going to test your Alexa skill by communicating with Alexa, which can be completed using any of the following:

- A. **Alexa Device** (like an Echo Dot)
- B. **Alexa App** (Alexa on a mobile device)
- C. **Browser-based Alexa Simulator in MIT App Inventor** (Alexa on App Inventor)
- D. **Alexa developer console** (Alexa on a computer)

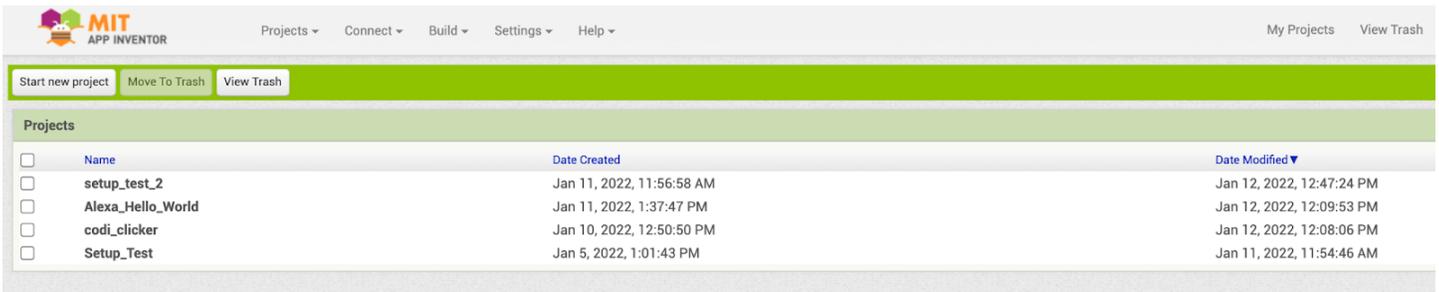
Requirements for Testing

1. In order to test, you must have a skill already developed on App Inventor. You can follow any of the tutorials listed below to create one:
 - a. Hello World
 - b. My Calculator

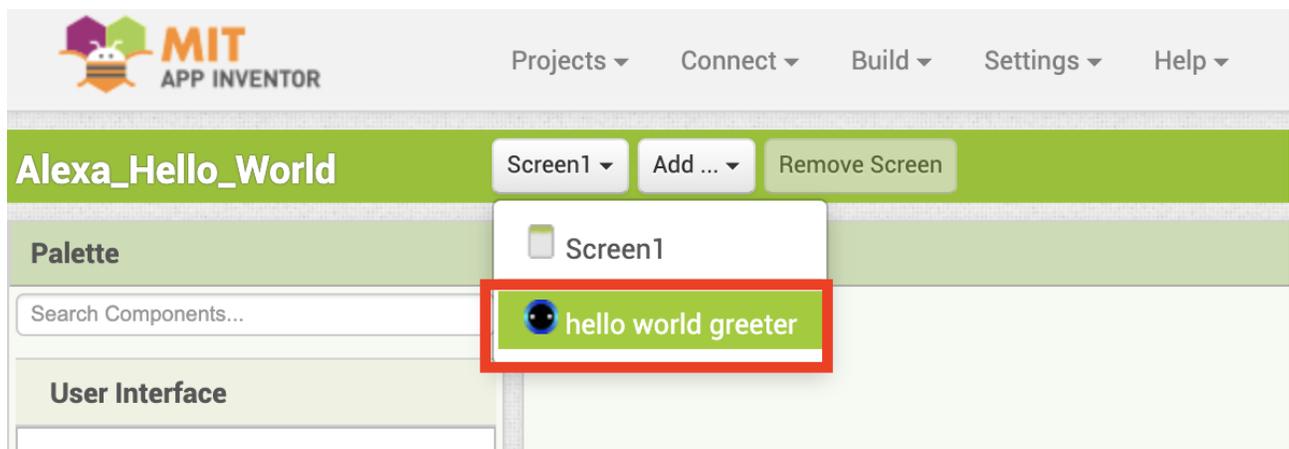


Testing your Skill

1. Go to the <https://alexa.appinventor.mit.edu> website, and if you are not at the testing page, open your project with the Alexa skill you want to test. For this demonstration, we will use the project “Alexa_Hello_World”

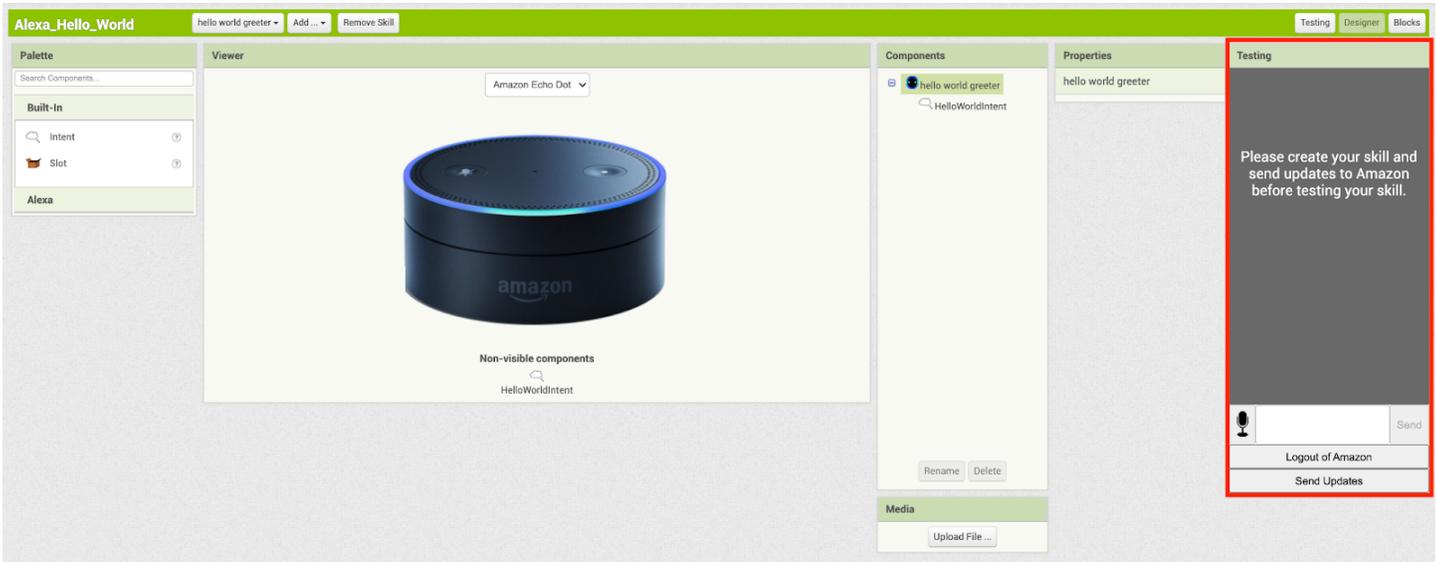


2. In the Designer Toolbar at the top of the screen, you will see a dropdown button labeled “Screen1”. Press it, and within it, select your skill that you created. In this example, we select the “hello world greeter” skill.

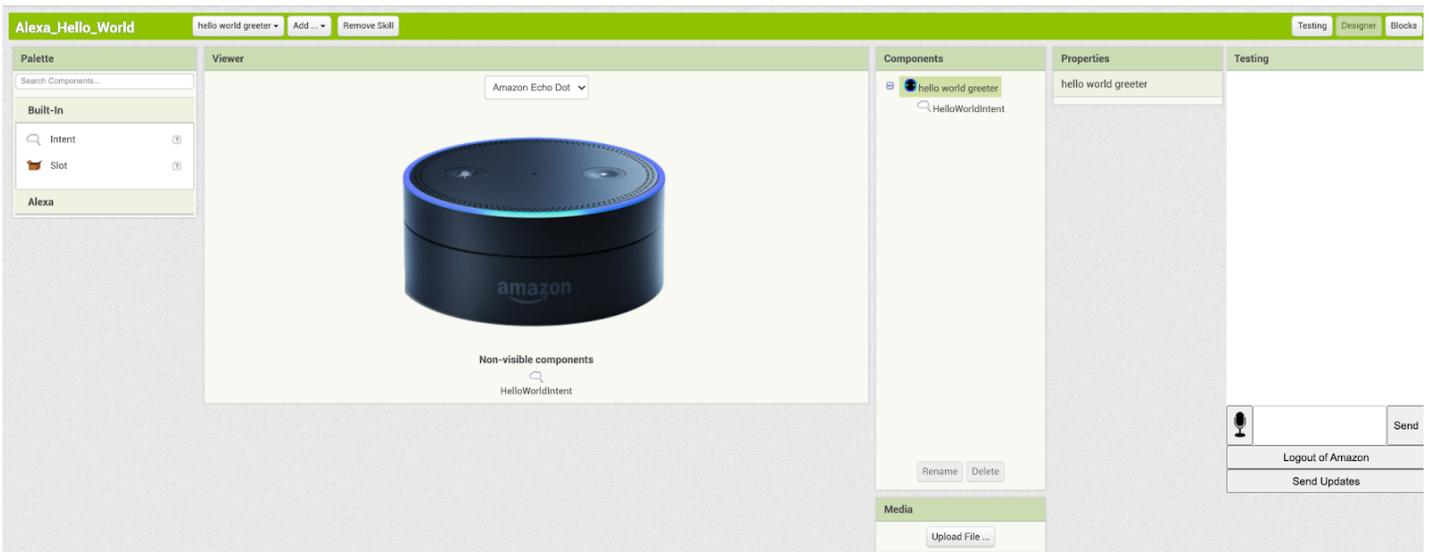




3. You should see a screen like below, with a “Testing” box on the right-hand side. At the bottom of the “Testing” box, if you are signed in, there should be a **“Send Updates”** button. Press it to send your skill to Amazon.



4. Wait a few minutes until the “Testing” box turns white and finishes sending the skill to Amazon.





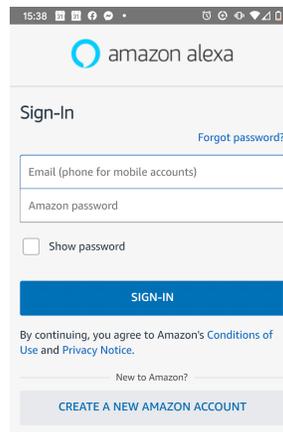
a. Testing on an Alexa Device

1. If you have an Alexa device, complete the [Alexa setup instructions](#).
2. Say, “Alexa, open **<Invocation Name>**”.
3. Say your command, in this structure: “Alexa, *tell* **<Invocation Name>** to **<Utterance>**”
4. Your device should respond appropriately to how you programmed it.



b. Testing on the Alexa App

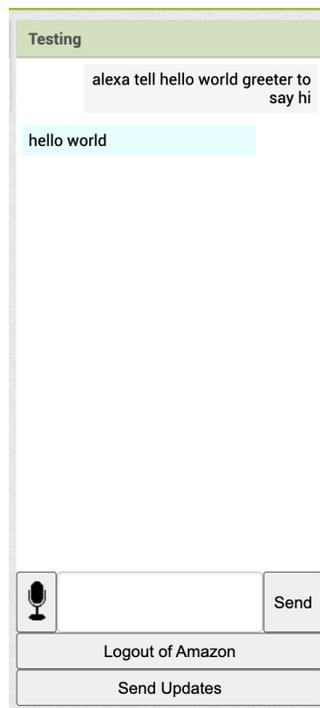
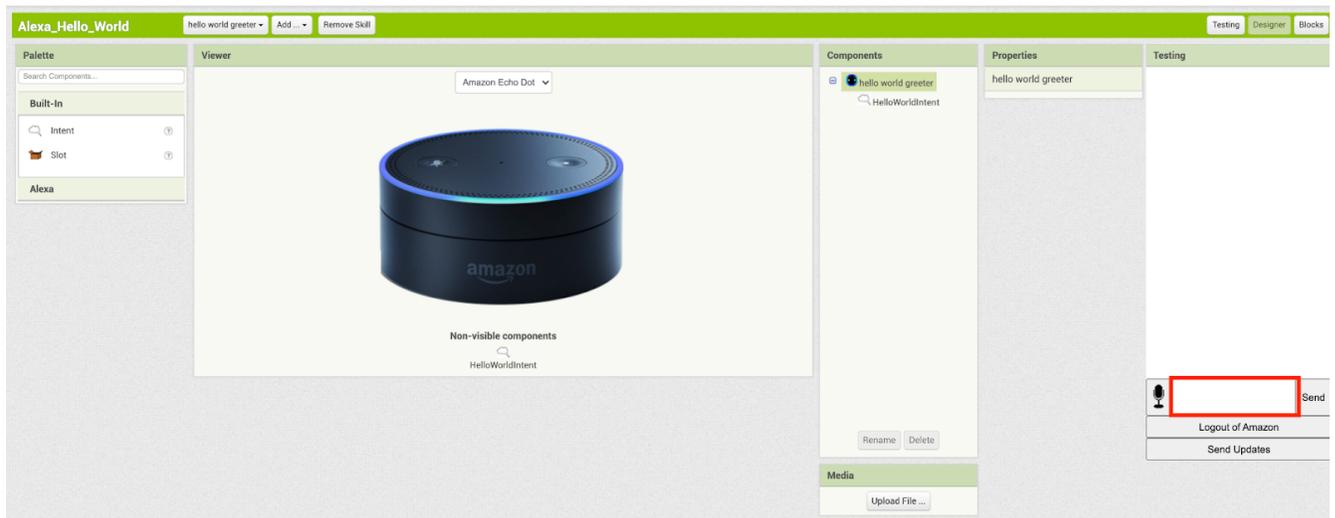
1. If you don't have an Alexa device, but you have a smartphone or tablet (iOS or Android), you can test using the Alexa app. You can download the Alexa app on the [Google Play Store](#) or the [iOS App Store](#) depending on your device.
2. Sign into your Alexa app using your **Alexa Developer Account**.



3. Say, “Alexa, open **< invocation name >**”.
4. Say your command, in this structure: “Alexa, *tell / ask* **<Invocation Name>** to **<utterance>**”
5. Your device should respond appropriately to how you programmed it.

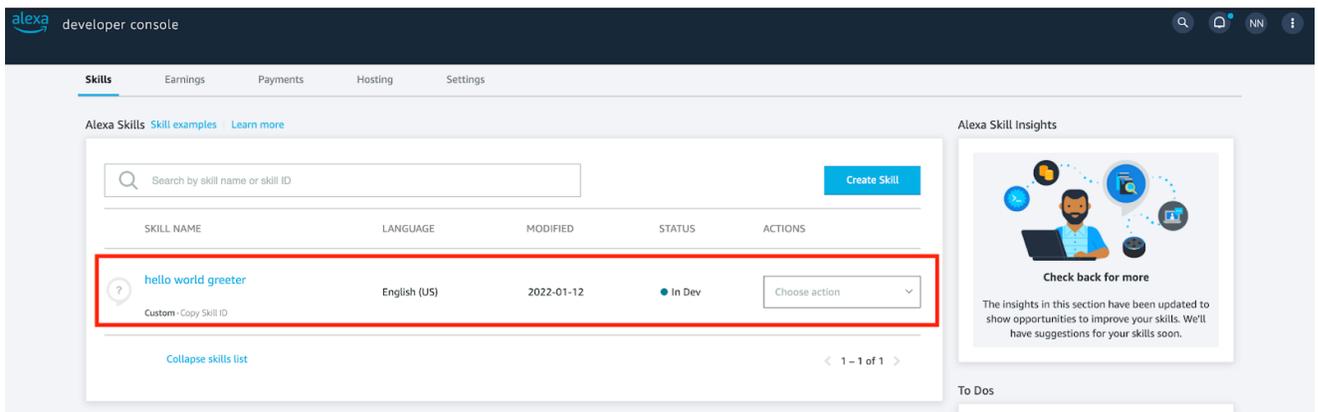
c. Testing with a Browser-based Alexa Simulator in MIT App Inventor

1. In the “Testing” box textbox at the bottom, write your command in this structure: *“Alexa, tell / ask <Invocation Name> to <utterance>”*. In this demonstration we wrote *“Alexa, tell hello world greeter to say hi”*



d. Testing on the Developer Console

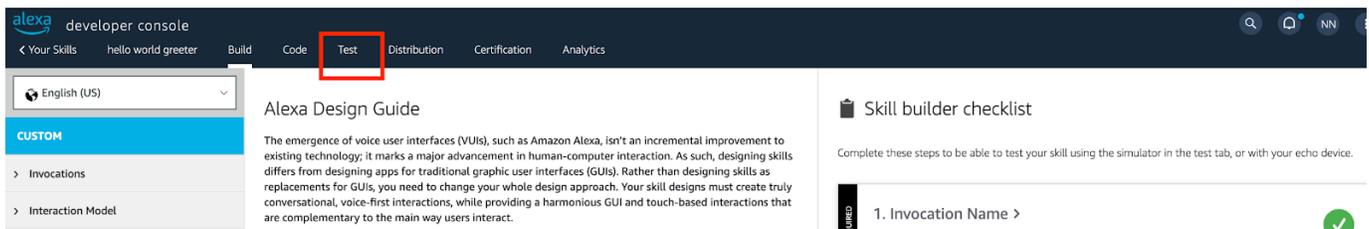
- Go to <https://developer.amazon.com/alexa/console/ask> and sign in with your **Alexa Developer account**. Once logged in, you should see your skill's Invocation name on the home page. In this demonstration, our skill is *"hello world greeter"*. Press on the blue title of your skill.



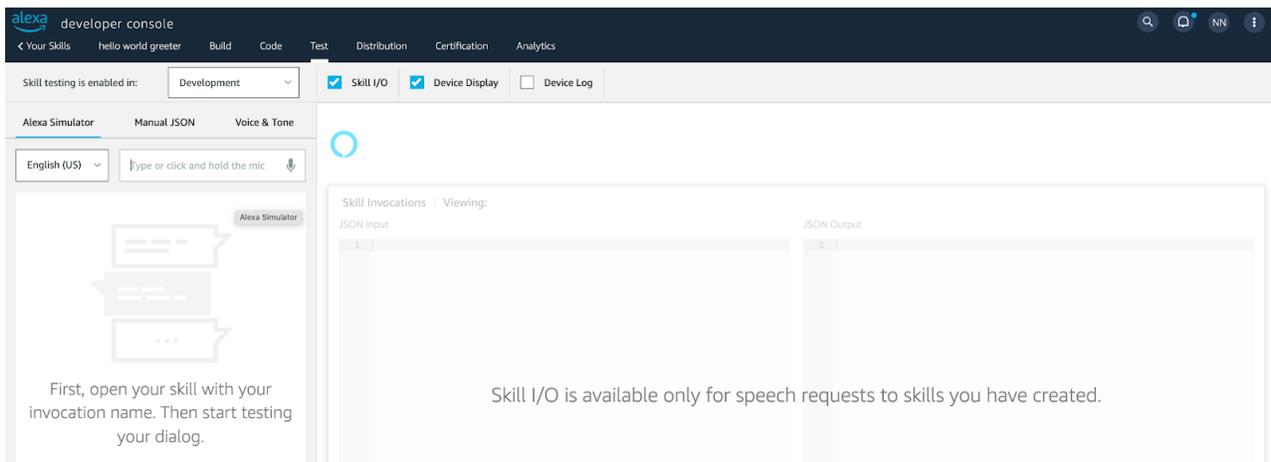
The screenshot shows the Alexa Developer Console interface. At the top, there are navigation tabs for Skills, Earnings, Payments, Hosting, and Settings. Below this, there's a search bar and a 'Create Skill' button. A table lists skills with columns for Skill Name, Language, Modified, Status, and Actions. The skill 'hello world greeter' is highlighted with a red box. To the right, there's a section for 'Alexa Skill Insights' with a 'Check back for more' button and a message about updates.

SKILL NAME	LANGUAGE	MODIFIED	STATUS	ACTIONS
hello world greeter Custom - Copy Skill ID	English (US)	2022-01-12	In Dev	Choose action

- In the navigation bar at the top, press on the "Test" tab. You should now be on the page below.



The screenshot shows the 'Test' tab selected in the navigation bar. The page is titled 'Alexa Design Guide' and contains text about voice user interfaces (VUIs). To the right, there's a 'Skill builder checklist' with a section for '1. Invocation Name' which is marked as complete with a green checkmark.



The screenshot shows the testing interface. At the top, there's a dropdown for 'Skill testing is enabled in:' set to 'Development'. Below that, there are checkboxes for 'Skill I/O', 'Device Display', and 'Device Log'. The 'Alexa Simulator' tab is selected, showing a microphone icon and a text input field. Below the input field, there's a message: 'First, open your skill with your invocation name. Then start testing your dialog.' To the right, there's a 'Skill I/O' section with 'Skill Invocations' and 'Viewing:' labels, and two columns for 'JSON Input' and 'JSON Output'. A message at the bottom states: 'Skill I/O is available only for speech requests to skills you have created.'



3. In the leftmost box, write “*Alexa, open < invocation name >*”. For this demonstration, we will say “*Alexa, open hello world greeter.*”
4. After, write your command, in this structure: “*Alexa, tell <Invocation Name> to <utterance>*”.
5. Your device should respond appropriately to how you programmed it.

alex developer console

< Your Skills hello world greeter Build Code Test

Skill testing is enabled in: Development

Alexa Simulator Manual JSON Voice & Tone

English (US) Type or click and hold the mic

Alexa Simulator

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

alex developer console

< Your Skills hello world greeter Build Code Test

Skill testing is enabled in: Development

Alexa Simulator Manual JSON Voice & Tone

English (US) Type or click and hold the mic

alex open hello world greeter

This Skill was created with MIT App Inventor.

alex tell hello world greeter to say hi

hello world



Congratulations!

You now know multiple ways to test your skills! Feel free to explore more of each one, and choose the one that is best for you.