


Intro to Voice AI: Student Guide

Name: _____ Class: _____

My assigned username: _____ Password: _____

Directions: Throughout today's lesson, you'll learn the following new words. Match the words to the definitions and diagrams on the worksheet as we go. You may use some words more than once.

intent	string	function	wake word	variable	voice ai	utterance	skill name
Video	Vocabulary:						
Voice AI Basics	<p>_____ : technology that recognizes human voices, interprets their meaning, and offers a response in return</p> <p>_____ : a pre-programmed word that triggers a voice AI device</p> <p>_____ : a question or command a user makes to a voice AI</p> <p>_____ : the desired response to a question or command made to a voice AI</p>						
Tutorial 1: Hello, Moon!	<p>_____ : a block of reusable code used to perform an action</p> <p>_____ : a series of characters like letters or numbers</p> <div>  <p>⌘ triggers an _____ (like telling the time)</p> <p>_____</p> </div>						
Tutorial 2: Space Fact Generator	<p>_____ : a value that can change</p>						

Mission 1: Hello, Moon!

Goal: Code an Alexa skill using voice AI that can say, "Hello, Moon."

Mission Checklist

- ☐ I created a new project in MIT App Inventor.
- ☐ I added an intent with at least three utterances.
- ☐ I added a function to tell Alexa what to do when "SayHiIntent" is run.
- ☐ I tested the Alexa skill using at least three different utterances

Directions:

1. Login to Alexa Skills Inventor using one of the methods below:
 - a. Go to your unique class URL (your teacher will give you this.)
 - b. Go to <https://alexaskills.appinventor.mit.edu> and enter **your credentials** from the student login card your teacher handed out.
2. Select "My Projects" from the top menu. Then, click the "Start New Project" button to start a new project.
3. Name your project: "AlexaSpaceProject."
4. Add a skill and give it a unique name like "moon talker".
5. Draft the "Intent" Component over to the Alexa device to add it. Then, rename it.
6. Program at least 3 utterances.
7. Code your intent using the coding block screen.
8. Send your updates to Amazon.
9. Test your skill! Try an utterance that is similar, but that you didn't program!

Need help? Use the tutorial (Click "Toggle Tutorial" at the top) to rewatch the videos.

Example code:



Mission 2: Fact Generator

Goal: Code an Alexa skill that generates fun space facts using voice AI.

Mission Checklist

- ☐ I added a new intent and utterances.
- ☐ I coded a function to tell Alexa what to do when "Tell Fact Intent" is spoken.
- ☐ I added a variable to make Alexa say a random fact each time.
- ☐ I tested the Alexa skill by asking it for a random fact

Reference: Below are example space facts you can use OR find your own!

Sunsets on Mars are blue	Space is completely silent	Mars has water too	One million Earths can fit inside the Sun
Fine dust makes the blue part of the sky much more visible.	There is no atmosphere in space which means that sound has no medium or way to travel to be heard.	For years, it was thought liquid water only existed on Earth. More recently, NASA presented the strongest evidence yet that there is intermittent running water on Mars, too!	— and the sun is considered an average-size star.

Directions:

1. Login to Alexa Skills Inventor by going to <https://alexaskills.appinventor.mit.edu> and entering **your credentials**.
2. Open your project: "AlexaSpaceProject."
3. Add a new skill and give it a unique name like "space expert".
4. Draft the "Intent" Component over to the Alexa device to add it. Then, rename it.
5. Program at least 3 utterances.
6. On the blocks screen, create a global variable and use the list block to supply a list of facts.
7. Code your intent to choose a random item from the list when your intent is spoken.
8. Send your updates to Amazon.
9. Test your skill! Try an utterance that is similar, but that you didn't program!

Need help? Use the tutorial (Click "Toggle Tutorial" at the top) to re-watch the videos.

Example code:

```

when FactGenerator .spoken
do say pick a random item list get global spacefact

initialize global spacefact to
make a list
  "Sunsets on Mars are blue."
  "Mars has water too."
  "Space is completely silent."
  
```

Understanding the AI in Alexa:

Directions: As you watch the interview with the Amazon Expert, jot the answer to each of Bryant and Olivia's big questions in your own words.

Why did Amazon choose the name "Alexa"?	
How does Alexa's AI work?	
How does Alexa learn new words?	
How do you know when Alexa is listening?	
What's something Jeff wants everyone to know about Alexa?	

Lesson Wrap Up:

Directions: Take a second to write down your thoughts, then share out.

What's something you learned today that you didn't know before? What surprised you most?	What would you like to learn more about?

Thank you for learning about voice AI! Give us feedback at www.amazon.com/alexaskillsinventorsurvey.

Keep exploring at AmazonFutureEngineer.com!