**Project 3: Building a Children’s Skill**

In this project, you are going to develop an Alexa Skill from scratch that is designed specifically for children under the age of 13.  All Skills that meet Amazon’s certification [requirements](https://developer.amazon.com/docs/custom-skills/submit-an-alexa-skill-for-certification.html) may be submitted (if you wish) to the [Alexa Skills Challenge: Kids](https://developer.amazon.com/blogs/alexa/post/f9671946-9039-45a4-83a7-ed1e15de682d/alexa-skills-challenge-offers-250-000-in-prizes-for-best-kid-skills), with the opportunity to win various prizes.  Note: there is a special prize for “best skill submitted by high school students!”

**What Amazon is Looking For**

The Alexa Skills Challenge invites developers to build an Alexa skill that educates, entertains, and engages kids under 13. We’re looking for skills that invite young listeners to explore new things, to be creative, ask questions, solve problems, and be proud of their accomplishments. A great educational skill should inspire learning. Maybe your skill will help kids set goals, or get into a routine, plan a project, or follow step-by-step instructions.

But sometimes kids just want to have fun! So we’re looking for highly entertaining kid skills too. Consider skills that have interactive stories, funny jokes or sounds, or a sing-along with other kids. Create something kids will tell their friends about on the playground.

Your skill will be judged on:

* the quality, creativity, and originality of your idea
* the implementation of your idea including ease-of-use and whether it performs as expected
* its potential impact including its ability to educate, entertain, and/or engage children under 13
* its accompanying submission package including the skill description and ID, video demo, and other materials
* customer engagement including factors such as minutes of usage, the number of new and recurring customers, customer ratings, and more

**What Your Instructor is Looking For**

Your final project submission will be judged on the following criteria:

* The creativity and originality of your idea
* The implementation of your idea into a working (proof of concept) Alexa Skill that runs on an Alexa-enabled device
* The ease-of-use of your Alexa Skill (per the Voice User Interface Design Principles we have studied)
* Incorporation of at least two of the major topics studied in this course (listed below)

Topics we have studied in this course:

* Custom Slots
* Multiple Optional Slots
* Built-in Slots (Amazon’s Date slots, etc.)
* Session Attributes
* API Integration
* SSML

Additionally, you should use the [Trello Final Project board](https://trello.com/b/E9FKAiX8/final-project) to document your team’s progress.  Please make sure you have a card for each of the following:

* Outline your idea
  + 1-2 line description of your idea
* Voice User Interface
  + Link to a flow chart in [draw.io](https://www.draw.io/) with outline of user experience
* Task Breakdown
  + Checklist of tasks to be completed with name(s) of team members who will be completing each task
  + Make sure to check off completed tasks as you go, so your teammates and I are aware of the progress you have made
* User Feedback
  + Once you have a working proof of concept / prototype of your idea, each team member must test it on at least one child under 13 years of age
  + Document your script & feedback in this card

**Mandatory Check Ins with Course Instructor**

Each team must check in with the course instructor after:

1. Coming up with an idea, a voice user interface, and the task breakdown

[No Later than **Friday, December 1st**]

1. Integrating some code written by different team members

[No Later than **Friday, December 8th**]

**Due Dates & Final Presentation**

By **Tuesday, December 12th, at 11:59 pm (Central)**, all teams must submit their code for a working prototype, along with accurate and up-to-date Trello cards for each of the tasks mentioned above.

On **Friday, December 15th during scheduled class time**, each group will have the opportunity to present their final project to the class.  Presentations should include:

* Live demo of your Alexa Skill
* Discussion of User Feedback
  + What feedback would you incorporate in future iterations of the Skill vs. what feedback would you choose not to incorporate?
* Q&A with classmates

**Rubric**

Creativity & Originality of your Idea 10 pts.

Working Proof of Concept / Prototype (runs on Echo) 15 pts.

Ease of Use 10 pts.

Incorporation of two major topics 20 pts.

Documentation of Process (Trello) 10 pts.

Documentation within Code (comments) 5 pts.

Group Participation

* Your team’s assessment 8 pts.
* My assessment 7 pts.

Final Presentation 15 pts.

**Total Possible Points 100 pts.**

**Additional Resources**

* Webinar on [Best Practices for Building Engaging Kid Skills](http://dev.amazonappservices.com/kids-skills-oct-web-reg.html)
* [Tips for Building a Standout Alexa Skill](https://developer.amazon.com/alexa-skills-kit/guide/build-engaging-skills)
* Example engaging skills
  + [Tricky Genie](https://www.amazon.com/Tellables-Tricky-Genie/dp/B01IKR3OAC/)
  + [The Tickle Monster Game!](https://www.amazon.com/Colin-McGraw-Tickle-Monster-Game/dp/B01ER4X8YO/)
  + [The Name Game (banana-fana)](https://www.amazon.com/Alex-Rosen-Name-Game-banana-fana/dp/B017OBZR50/)
  + [Listening Comprehension Practice](https://www.amazon.com/Tellables-Listening-Comprehension-Practice/dp/B01E6FWOS0/)