

Cozmo: Kids get programming boost with drag-and-drop interface

June 28 2017, by Nancy Owano



(Tech Xplore)—Cozmo is a little robot with a big robotic brain. That's how Anki, the team behind Cozmo, describes it.

Big brain and big personality to match. Up to now, however, to get the



most out of Cozmo you had to be a savvy robot scientist. Not any more. The company is sending the word out.

"Now anyone who can drag and drop can do amazing things with him."

IEEE Spectrum reported on the company's Monday announcement. "Today, Anki is announcing Code Lab, which takes that SDK and adds a graphical drag-and-drop interface that makes it incredibly simple to get Cozmo to do complex tasks involving vision, manipulation, and decision making, even if you have zero programming experience."

Boris Sofman, company co founder and CEO: With the launch of Cozmo last year they also launched a consumer robotic platform—the Cozmo SDK—used by top universities such as Carnegie Mellon and Georgia Tech.

The SDK drew interest from researchers and makers. The team asked: What about delivering the same type of functionality but in a kid-friendly programming interface?

Now Hanns Tappeiner, Anki co founder and president, said they are releasing Cozmo Code Lab.

This is described as a kid friendly programming interface for Cozmo; Code Lab is putting functionality in the user's hands. "Once you drag and drop a few simple blocks you'll see Cozmo act out your creation."

They are letting young and old to explore; the tools bring users into contact with coding basics and the chance to build their own stories.

They are using a graphical programming language, Scratch, and the video referred to Scratch Blocks.



(Scratch is a project of the Lifelong Kindergarten Group at the MIT Media Lab.)

Code Lab is available now to all Cozmo owners as a free software update to the Cozmo app, said the press announcement.

Drag and drop simplicity is its key characteristic for accessing robotic functions—motion, manipulation, animation, facial and object recognition.

Celia Gorman and Evan Ackerman described how it works. "Code Lab adds a graphical user interface, or GUI, on top of the SDK, based on MIT's visual programming language Scratch. Colorful interactive blocks represent different functions, and by dragging and dropping those blocks (and making some minor edits to their parameters), you can get Cozmo to do all sorts of custom behaviors."

Kids are challenged to find a solution to prescribed prompts by moving the blocks into an appropriate sequence.

Anki said that "Each block represents a specific action, movement, or animation including: Movement: Make Cozmo drive, from simple forward/backward/turns to intelligent motions like avoiding obstacles. Actions: Control its body. Animations: Access dozens of animations that make Cozmo's personality. Events: Trigger intelligent actions such as having Cozmo react to a face, smile, or frown, or use its cubes to trigger a reaction.

Natt Garun talked about this in *The Verge*: "The functions even let Cozmo look specifically for smiling or frowning faces, and comes with a ton of preprogrammed Cozmo reactions to these if conditions, such as a celebratory dance, a laugh, or an annoyed groan."



Interestingly, this all sounds as if the Cozmo only draws the enthusiasm of young people. Not so.

The Verge reported that "Since its launch, Anki says the demographic of Cozmo owners were split about 50 / 50 between adults and children." As for gender, said Garun, "50 percent of those groups were split evenly between male and female users."

According to video notes, Cozmo is available in the U.S and launching in Canada in July, and France, Germany, U.K., and Nordic countries in September.

Sofman said, "Based on the Scratch Blocks project, a collaboration between MIT Media Lab and Google, we now have a powerful tool that gives anyone interested in learning to code a <u>robot</u> the opportunity to unleash their creativity. There's simply no consumer robotics platform available like Cozmo."

More information: anki.com/en-us/cozmo/code-lab

© 2017 Tech Xplore

Citation: Cozmo: Kids get programming boost with drag-and-drop interface (2017, June 28) retrieved 10 April 2024 from

https://techxplore.com/news/2017-06-cozmo-kids-boost-drag-and-drop-interface.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.