COONEY CENTER SANDBOX

ScratchJr

Partner
Scratch Foundation

Product
ScratchJr is an introductory programming language that enables young children (ages 5-7) to create their own interactive stories and games.

Goals
ScratchJr's goal is to empower kids as young as 5 years old in a fun and playful way to be designers, even with little experience or adult guidance to get started. It has more than 32 million users and is available in 194 countries.

Research questions
The ScratchJr team sought to understand how children explored the app on their own and with peers, what questions they ask adults, and what types of scaffolding they might need to best enjoy and use the app.

Child-centered Approach
The Joan Ganz Cooney Center partnered with The GIANT Room and P.S. 161 Pedro Albizu Campos public school in New York City to conduct three in-person sessions with 15 children ages 4-6. We held 2-hour workshops where children playtested the ScratchJr app and prototyped their own coding language.

Findings & Recommendations

1

Finding
Learners without prior coding knowledge spent more time on the drawing section of the app.

Recommendations
Explore nudges and prompts, such as having coding blocks slide onto the screen, that will help guide children's attention to different ways to use the app to tell stories.

2

Finding
Learners may not understand what the icons for each block mean.

Recommendations
Update the icons to more concrete representations of the actions, and where possible, animate the icons on the blocks so that kids can see the code in action by just looking at the code block.

3

Finding
Younger learners didn't understand the cause and effect relationship between the blocks and the characters' movements.

Recommendations
Create a code for the learners' actions as they play with the characters on the screen and show how the blocks can represent the actions. That way learners get familiar with the blocks as they naturally play with the app.

"The kids were very excited. They loved the sessions and were sad that they were over. We were all excited that our babies were being exposed to coding."

— School partner

"This partnership provided a great learning experience and many insights for our product and design teams. A lot of kids' first entry point in ScratchJr is in drawing and creating something and then making that drawing move and change. It's exciting to be able to witness how kids can get at those connections as they're working through a project."

— Sarah Smirnoff, Co-Executive Director at the Scratch Foundation

The Cooney Center Sandbox is a design and innovation lab that helps digital media innovators create products that are good for kids.

SESAME WORKSHOP®
Joan Ganz Cooney Center

Learn more: cooneycenter.org/sandbox
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THE GIANT ROOM

SCRATCHJr