

Purposeful Play:

Evaluation and Co-Design of Casual Music Creation Applications with Children

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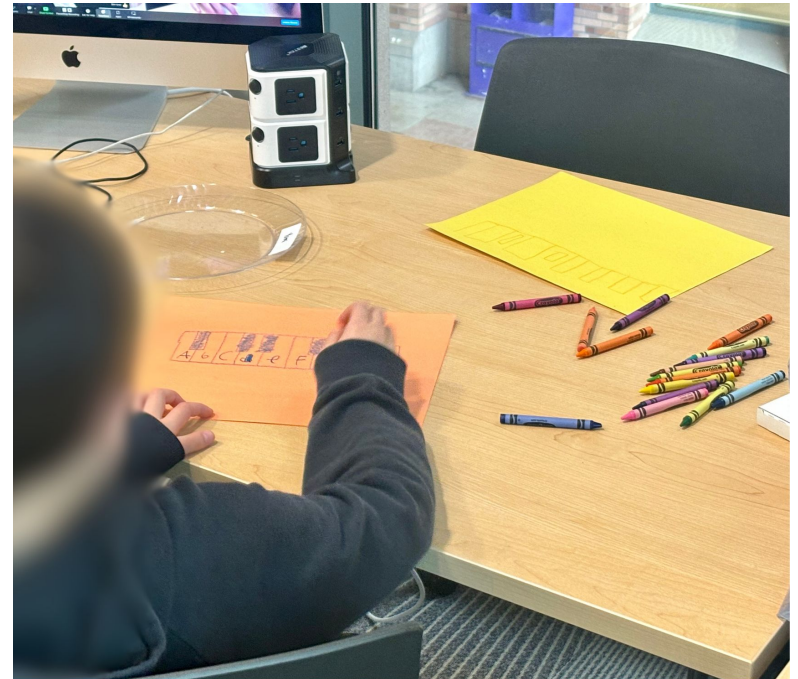
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Casual Music Tools for Children

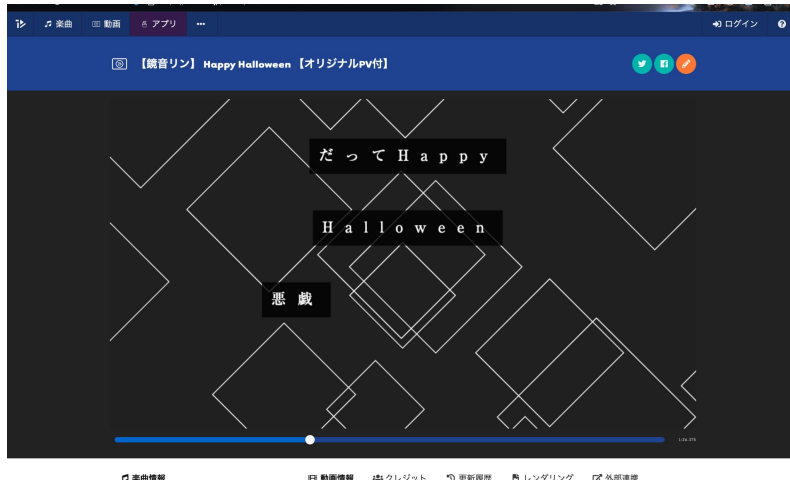
- > Children have unique creative needs
- > Music applications for children tend to focus on building skills rather than casual music creation
- > Children are an understudied population in MIR
- > Therefore, our study addresses the following:
 - How do children perceive casual music creation activities and which elements of creative applications facilitate expression?
 - What insights can inform the design of future casual music creation tools?

Methodology

- > 2 Co-Design Sessions
- > 10 children (6-13)
- > Collected data through videos and design artifacts
- > Inductive qualitative approach for data analysis



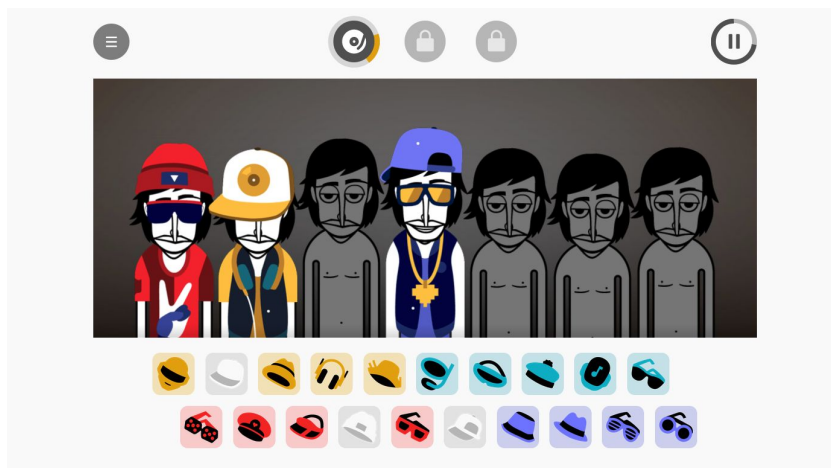
Design Session 1



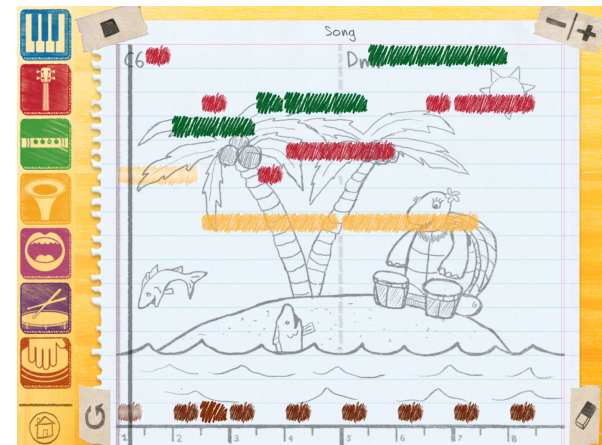
TextAlive (<https://textalive.jp/>)



TextAlive Flow (<https://flow.textalive.jp/>)

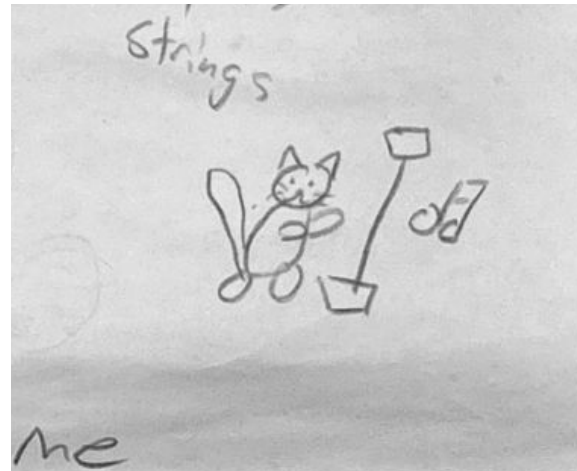
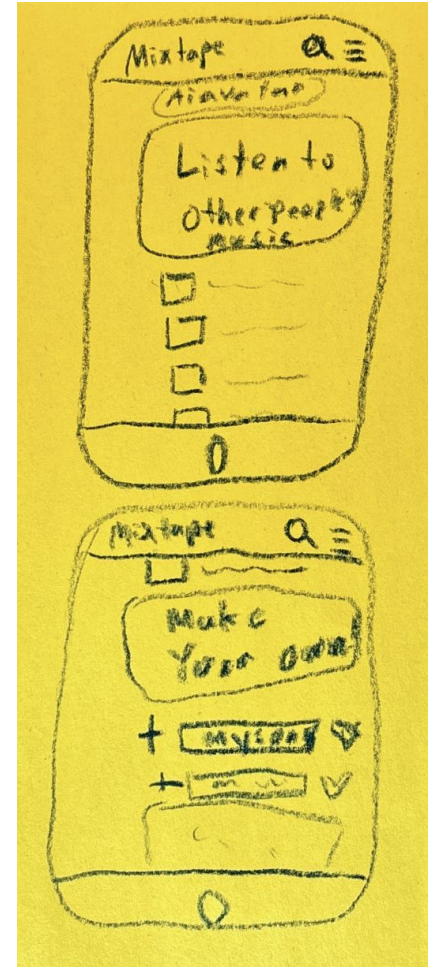
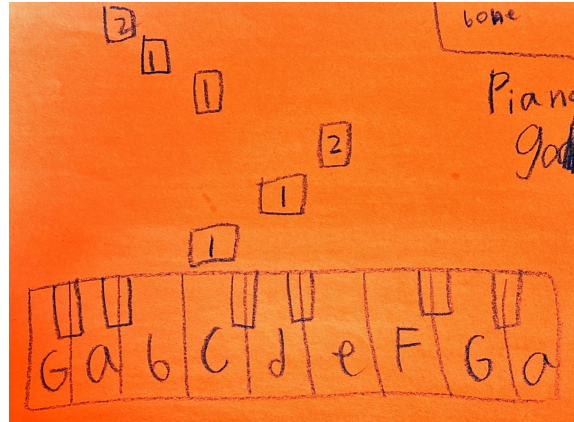
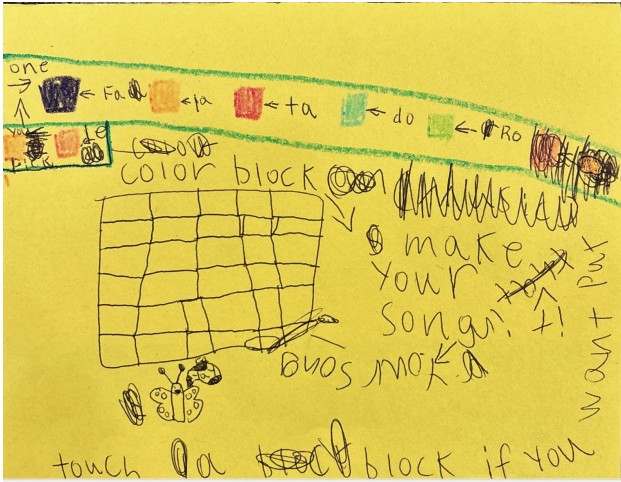


Incredibox (<https://www.incredibox.com/>)



Sketch-a-Song (<https://sketchasong.com/>)

Design Session 2



The Purposeful Play Toolbox

The process in which children explore an application's possibilities through creating personal outcomes based in self expression. In this type of play, casual interactions with music are intentional acts of creativity, where the process leads to a musical outcome worthy of sharing with others.

The Purposeful Play Toolbox

Controlled Serendipity

E.g., structured guidelines, controlled randomness, and transparent feedback mechanisms

Visual Scaffolds

E.g., real-time visualizations, character-based imagery, and customizable aesthetics

Direct Manipulation

E.g., interactive elements, objects responding to user actions, and tactile interactions

Shareable Intermediate Outputs

E.g., sharing options, user-generated content galleries, and the ability to remix others' work

We look forward to talking with you at our poster!

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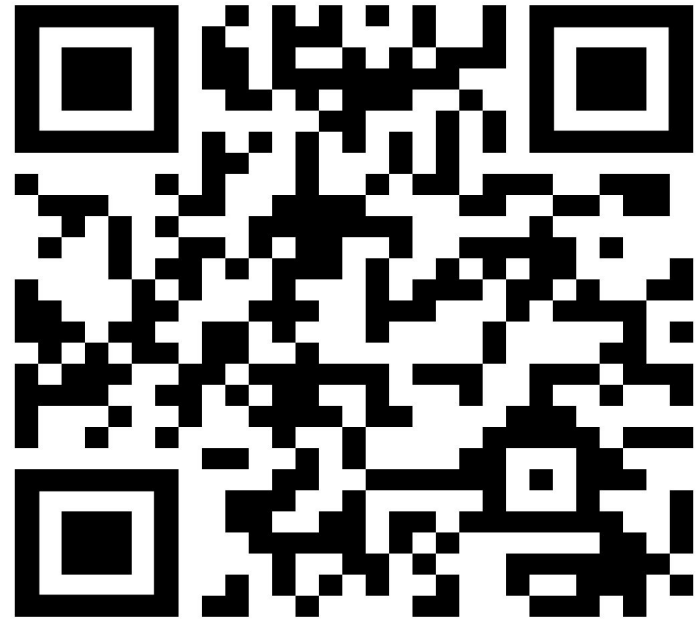
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Supplemental Material