

# Speech Games

Featuring: Team Socks

A decorative graphic in the bottom right corner consisting of a light blue square with a white diagonal line from the top-left to the bottom-right, creating a folded paper effect.

# Team Socks!

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# Agenda

Blockly

VUIs and CS Education

Speech Games

Results

What's next?

# What is Blockly?

The image shows the Blockly IDE interface. On the left is a category menu with the following items: Logic, Loops, Math, Text, Lists, Color, Variables, and Functions. The main workspace contains a 'repeat while' loop block. The 'repeat while' block has a 'do' section containing a 'print' block with the text 'Hello World!'. The 'while' section contains a 'set Count to' block with the value '1' and a 'Count <= 3' comparison block. Below the 'do' section is another 'set Count to' block with a 'Count + 1' arithmetic block. The right panel shows the selected language as 'JavaScript' and the corresponding code:

```
var Count;

Count = 1;
while (Count <= 3) {
  window.alert('Hello World!');
  Count = Count + 1;
}
```

# Speech Games



# Speech Games

## **Goal:**

Develop VUI and teaching platform for Blockly.

# Why?

Speech is the future!

~5% of people are motorically impaired.

CS Education is booming; can we improve it?

# Related Work

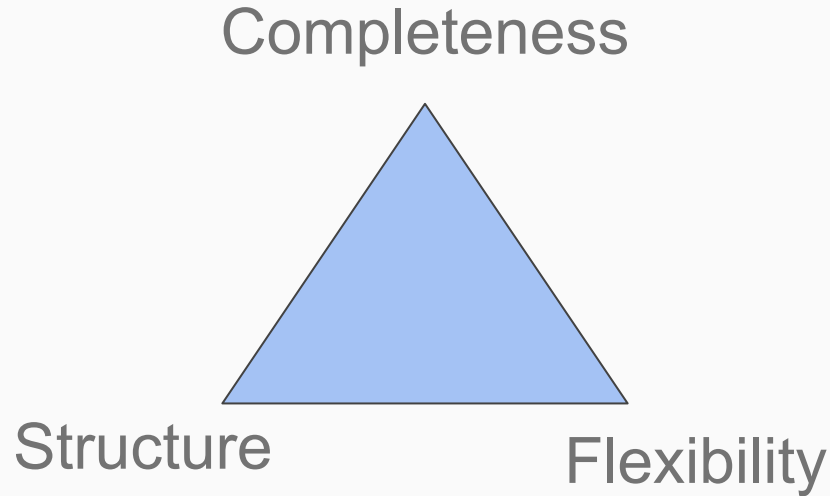
Harmonia (MSR)

UA-Huntsville Study

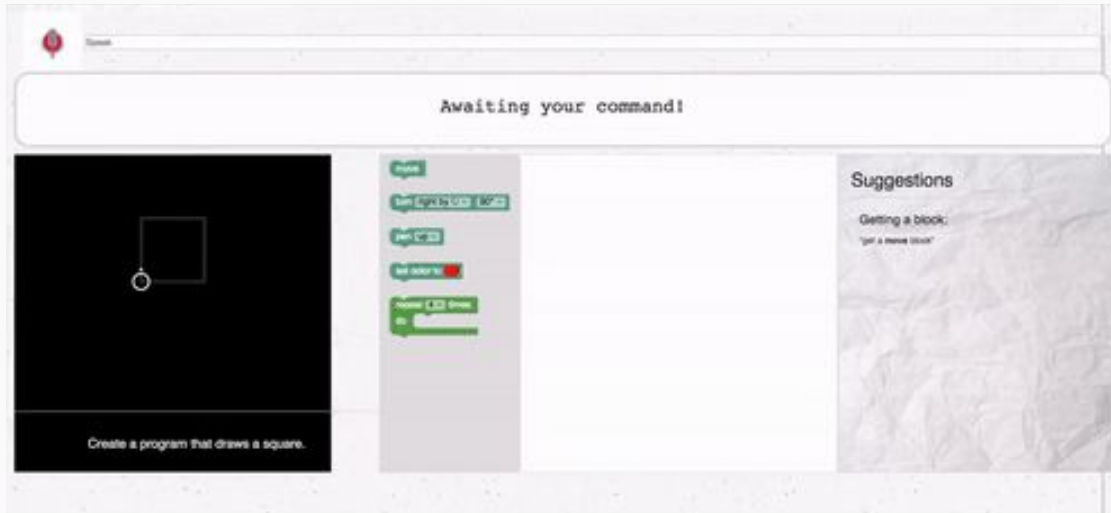
Vocola



# How do you speak a program?



# Design Choices and Results



Rigid Grammar

Match Blockly Semantics

Offer Suggestions

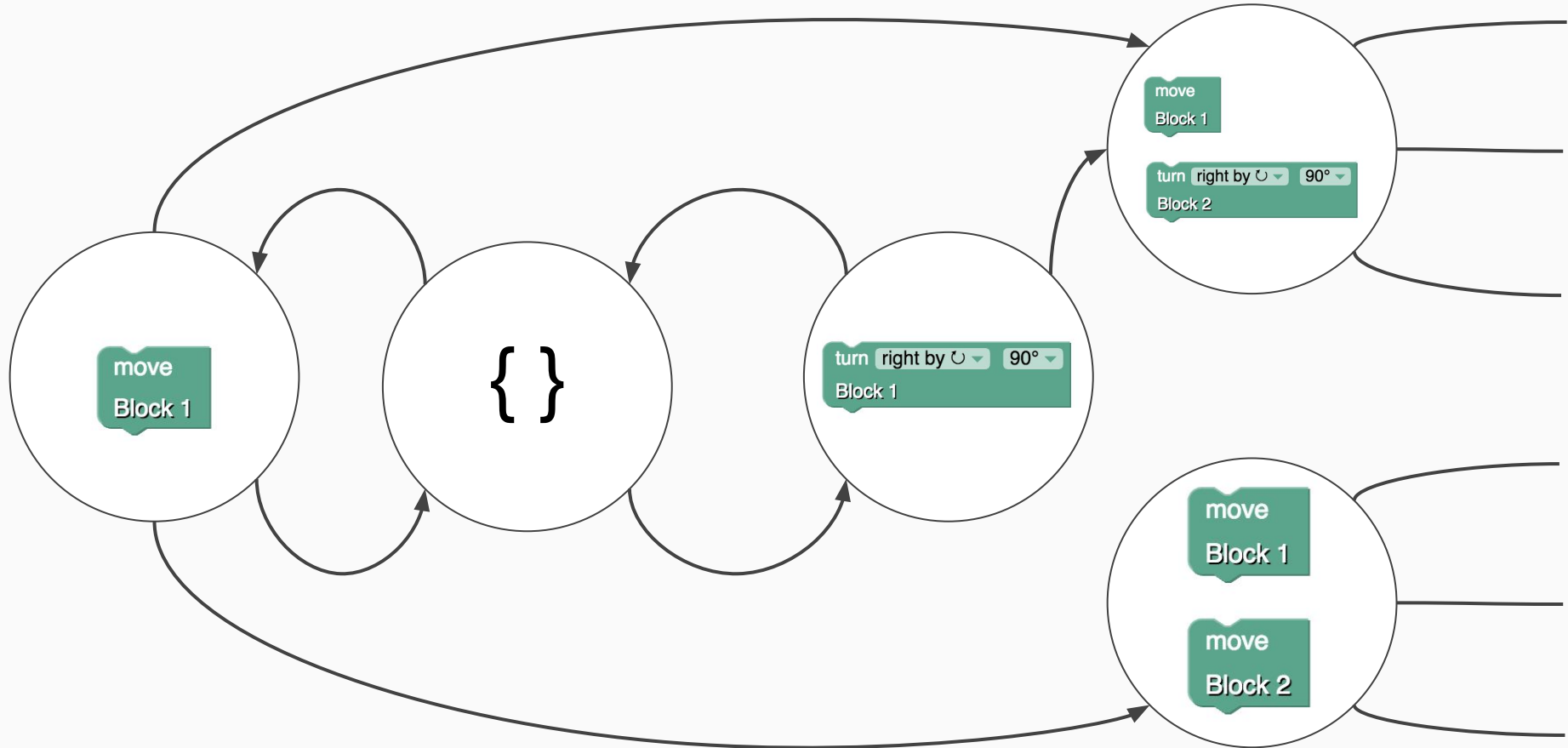
Speech  
Games  
Tomorrow

**User Studies**

**Teaching Platform**

**General VUIs**

# Bigger Picture



# Questions?

...anyone?