

Voice Programming in Computer Science Education

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1 Introduction

- 1.1 What is the goal of the project? What problem does it solve?
- 1.2 Who is meant to benefit?
- 1.3 What are the results or outcome of the project?

2 HCI Principles

- 2.1 What HCI principles were kept in mind in the design of our system?
- 2.2 How did those HCI principles influence our design decisions?

3 Blockly

- 3.1 What is the Blockly environment?
- 3.2 What is the goal of the Blockly project?
- 3.3 How are blocks arranged horizontally? What language do we use to describe this?
- 3.4 How are blocks arranged vertically? What language do we use to describe this?
- 3.5 Is just one chain of blocks allowed or several?
- 3.6 If several, how are they executed?
- 3.7 How does the user typically interact with Blockly?
 - 3.7.1 What's the medium (hint: mouse)?
 - 3.7.2 What actions are available?
 - 3.7.3 How can we group them into categories?
 - 3.7.4 How does moving blocks work?
 - 3.7.5 How does deleting blocks work?
 - 3.7.6 How does connecting blocks work?
 - 3.7.7 How does separating blocks work?

4 Turtle

- 4.1 What is the turtle game?
- 4.2 What set of blocks are available to complete the game?
- 4.3 What do these blocks do?
- 4.4 Why is the game divided into levels?
- 4.5 How do the levels serve to teach different programming concepts?