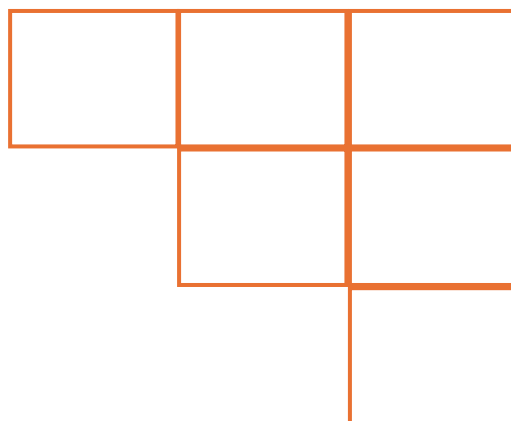


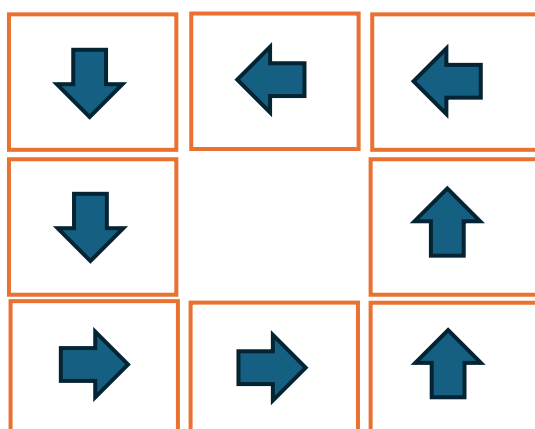
The building block that I designed also serves its purpose well for a coding metaphor. My building block is a box that can be stacked both in horizontal as vertical direction. The blocks also have an engraving. There exist multiple coding languages that all work slightly differently. From my background in Computer Science, I see that different languages serve different purposes, but most languages have a clear structure where code is ran from top to bottom. This can be visualized by stacking boxes.



Here, I stacked two boxes. The engraving here is a chess piece, but this could as well stand for a piece of code. In this example, firstly the Rook code would be ran and afterwards the Knight code. By creating a longer chain, a longer path could be made. In the design of the block that I made, 4 out of the 6 faces of the cube can be rotated in every direction. This also changes the direction of the pegs as well as the orientation of the image. By doing so, you can change the orientation of the whole structure. This could be a metaphor for the nested if statements. This would be shown with an upside-down stairs-like pattern like this:



Now by using engraving, loops could also be implemented. This would look something like this:



In this image, you can only see one side of the face that has an engraving. The other sides could still be used to define the content of the code block to be ran.

The affordance of this block lies in the way that it can easily be build together and separated without destroying any of the contents. It has both a high buildability as a decomposability factor. Scribbling on the blocks is possible, but engraving is cleaner.

The block servers as a metaphor for a code block. Multiple engravings can be used to define the functions and variables. Different chess logos could be used to stand for different functions. The direction of the logo determines the order of execution.

Variables are harder to define with this concept, but you could scrabble them on the block as well. Input/output is defined by the starting and ending point/block. A cluster of blocks could stand for a class.