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Supporting the Learning of Programming Logic Through a Block-based Online Game

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Abstract

There are currently different games designed for children to learn programming logic through applications or platforms that mainly use block-based programming languages, which allow developing the writing of a logical and ordered sequence of instructions through the use and application of commands in the form of graphic connections. The main purpose of this presentation is to show an online board game that was implemented to support the learning of programming logic. The game is a board where children have to move a rabbit that has to avoid obstacles in order to collect all the carrots placed on the board. In order to move the rabbit, children use a sequence of block commands, such as walk, turn left, turn right or jump. The game can have different levels of complexity, which makes children think of a solution in terms of the block commands available.

Keywords: board game, block commands, educational technology, programming concepts, programming logic