Buildasound

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Abstract

Buildasound is a sound building blocks game. It consists in creating shapes at the same time that you generate new sounds: there is no single objective (winning or losing), but instead the entertainment involved in playing and the opportunity to discover new melodies and constructions and constant creation based on the different positions of the blocks.

Keywords

Embodied interaction, game, children interaction dessign, image recognition, sound installation

ACM Classification Keywords

H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

Introduction

Buildasound is made of 25 big foam blocks lined with fabric. Three of the sides are of a different color – red, violet, green – and belong to a different game. The opposite face of each side of the game, which is white, has the image recognition code that will be read by the camera and sent to the computer.

The main objective of the project is to create an interactive work that invites public to participate. It has no aim of having a 'winner or loser', but it is instead a

game of constant creation. The feedback of the game is very straightforward and easy to understand.

It is primarily designed as a game for children aged 3-10 years, but it can reach a wider range of ages.

figure 1. Playing at *Perejil's Sound Festival* in Reus.

Design

The design and aesthetics of Buildasound is its most distinctive feature and the key to its success. The relatively large size of each block becomes huge when they are put together, making a big and soft structure in bright colors that is difficult to be unnoticed.

The fact that they are made with foam is one of the most important features. It allows the user to manipulate it almost without applying any force. They can be thrown, stepped on, squashed... and they do not break or hurt anyone. When you finish building, you can then jump on it and destroy it. This is something

that encourages children to play again building a new shape and makes the design flow by itself.

Materials and technology

It is made of 25 foam blocks of 23cm3 each one. The software used is Processing, Pure Data, SimpleSynth and Reactivision. The hardware needed is a PS3Eye webcam, a computer and speakers.

figure 2. Buildasound at *File* in Sao Paulo.

Points of interest

There are many other projects that use blocks for creating tangible musical objects. Buildasound's blocks are noted for being soft and large enough to make the user be able to move his whole body to manage them, especially is they are children. We tend to shrink more and more things and sometimes we miss something big and 'cuddly'. Technology can be very cold and distant. Buildasound pretends to be close and cozy.