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Familiar household items as program objects

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Abstract

The English language is but one of many languages globally in use, yet it seems to dominate the world of automation in its application to computer programming. Our research considers a programming environment in which the written word is not relevant; instead of text, we consider the use of physical objects to represent simple computer programs. This paper presents a reality in which artefacts, based on culturally significant objects, are chosen and arranged by the layperson in order to control the behaviour of light bulbs in a domestic environment. This work incorporates aspects of Gestalt theory and visual perception theory. We give an overview of prior work and conclude with an example.