AUTO PERFORMANCE ANALYSIS SYSTEM FOR VISUAL DRAG-DROP PROGRAMMING LANGUAGE APPLICATIONS IN CODING EDUCATION

Okt. Uğur Yıldız
Kocaeli Üniversitesi Enformatik Bölümü
uguryildiz@kocaeli.edu.tr

Prof. Dr. M. Melih İnal
Kocaeli Üniversitesi Enformatik Bölümü
minal@kocaeli.edu.tr

Abstract

Coding is seen as an important competence for critical thinking, problem solving, information and technology literacy by staff and professionals working in various sectors. Coding trainings for increasing computer programming and coding skills are found in educational curricula of many countries which are increasing in number from elementary school to university. However, it has been observed that visual drag-and-drop programming languages have been developed on many platforms, but the corresponding platforms for measurement and evaluation activities are weak and have difficulties.

One of these platforms is SNAP software which is based on web browser developed by JavaScript and readapted from Scratch software. In this study, it is proposed a SNAP based automatic performance analysis system prototype which can identify problems for instructor's problem and can be limiting / conditioning visual drag-and-drop components (blocks) to be used for solution of the problem and can measure the conformity of the solutions of the problem to the determined conditions, and discusses possible basic features needed.

Keywords: Visual Drag-Drop Programming Languages, E-Learning, JavaScript.