

## **Gender differences in computational thinking skills among Malaysian's primary school students using visual programming**

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### **ABSTRACT**

Computational Thinking (CT) is a thought process which utilize computer science concepts to solve problem in the real life. One of the methods to develop CT among the Children is by using visual programming to create computational artifacts such as animation and games. This study collected 50 animation and 47 games projects created by the primary school students in standard 6 (12-year-old) from the eight-week lesson using visual programming Scratch. The purpose of the study is to investigate if there is a significant difference between male and female students on CT skills of flow control, logic, data representation, parallelism, synchronization, user interactivity and abstraction. Source code projects were analyzed for CT skills score. Result from Mann-Whitney U test shows the different was not statistically significant between male and female students on CT skills mentioned previously.

### **KEYWORDS**

Computational thinking skills; Gender; Primary school students; Visual programming

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