

Interactive Multimedia Presentations - An Approach with the Scratch Programming Environment

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Recently, more and more people tend to use multimedia elements in their presentations such as video and animation, as they want to combine all the available options they have to present information. A major issue that an author of an interactive multimedia presentation should consider is the synchronization of the various media of the presentation. In order to achieve this synchronization, the author might have to use tools that require from him to have special background knowledge; they must be familiar with issues related to the programming of computers.

The Scratch programming environment, is an environment that have been developed in order to be used by kids for learning programming. It is approaching programming by using graphical blocks of commands that can be joined together to create scripts. Trying to take advantage of that approach, this dissertation is proposing Scratch as an alternative tool for developing interactive multimedia presentations suitable for people who are not familiar with programming.

In this paper, we will discuss the problem of the synchronization of the media in interactive multimedia presentations, and how the common tools approach that problem. Then after introducing the Scratch programming environment, we will approach the problem with the Scratch programming language, by demonstrating specific scenarios. Through the comparison between the tools and Scratch we will mention the advantages and the disadvantages of the tool and we will make the proposals for future work and improvements.