A Tractable Approach of Constructing Fertile Multimedia Content

Orrawin Mekpiroon, Buntita Pravalpruk, Pornchai Tummarattananont, and Thepchai Supnithi

National Electronics and Computer Technology Center (Nectec) Thailand
E-mail: buntita.pravalpruk@nectec.or.th

Abstract

eLearning is recognized as a flourishing topic for research, academy and business market. There are two main subjects for developing eLearning: learning management system development (LMS) and learning content development. Learning content development is mainly focused on how to develop a good content in order to achieve learner objective. Instructional design theory is usually applied for this purpose. However, the technique of content production and representation are also essential. It will help creating more effective and more efficient instruction media to support eLearning. This paper will introduce content development technique to create learning content that gives more efficiency and rapidly production.

At present, the content development is constructed in multimedia form which consists of text, image, sound, animation, etc. Flash animation is a tool for constructing online learning content. Flash animation use, vector-graphic animation technology which is suitably presented in network when compare to similar style of presentation developed with other tools. Developing flash animation normally requires a high level skill of expert to develop a content without too much time consumption. There are some difficulties for instructor to construct a large amount of online content by using flash.

In this paper, we present content development technique by using flash animation which is convenient to develop, reconstruct and increase reusability for online content. We apply XML as a content representation for developing our content. XML format has self described data, which can be applied to develop flash animation by Actionscript. This technique will enable teachers to create and change content easily with simple text editor. Teachers can manipulate flash animation without the same skill as flash creator.