

Analysis & Comparison of Interactive Multimedia Animation Authoring Tools

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1 Introduction

Interactive multimedia has fast become of the most fascinating and fastest growing areas in the field of information technology. It is a collaboration of various media and content that allows active participation by the user establishing two-way communication. The end product presents not only a powerful tool for information and entertainment, but also the opportunity in the tools we use to disseminate this information. (Preston and Hewitt, 2003) In order to produce interactive multimedia material to the demands of today's computer age, it is necessary to consider how synthetic media such as computer animation might be incorporated into an array of mediums such as digital media, interactive advertising and computer games. (Preston and Hewitt, 2003)

2 Animation multimedia authoring tools

Computer animation is a synthesising of natural phenomena, perception and imagination used to demonstrate and illustrate an idea or concept. (Clearead e-articles, 2009) "Animations use motion as a powerful tool to provide visual cues and help describe processes. They boost visual interest and can simplify concepts to aid explanations". (VUDAT, 2007). Today, animation can be created in a variety of sizes, details and speeds and by a number of authoring tools such as Microsoft Power Point, Adobe Flash, Adobe Director and Autodesk Maya.

Microsoft Power Point is one of the most basic media animation tools that incorporates animation on a basic level. . Even with the development of Microsoft Power Point, its limited animation capabilities exist to provide appealing embellishments to static layouts or slides. With its fixed palette of animated effects creating complex animations would entail rendering external media files from various applications and playing them within Power Point.

Adobe Flash is one of the most widely used 2D animation tools. It is a vector based key frame animation system and is amongst the most popular methods for adding animation and interactivity to web pages, its advantage is in using a script-based interface for repeated animation. Although Flash has evolved to produce rich media applications, animators and programmers fail to utilize the programmes interactive and animated abilities reducing it to basic two-dimensional animations and web banner button clicks. (Zongker and Salesin, 2003)

Adobe Director is an animation tool used for creating digital multimedia for distribution on the web as well as on compact disc. Supporting both 2D and 3D multimedia projects, Director's strengths are its object orientated programming scripting language which has the capacity to incorporate a variety of multimedia resources and integration for the web with Shockwave. Furthermore, it

offers advanced controls and features that not only create animated projects, but also software programs. Many multimedia programs can be developed with little or no programming skill, however, it is not quick to master with a steep learning curve. (Neubauer, 2002)

3D modeling systems have become more crucial with the rapid growth of computer graphics, Autodesk Maya is a powerful authoring tool for creating 3D animations. The software integrates 3D modelling, animation, effects, and rendering tools for producing highly detailed life like animated characters and environments that is in high demand in today's game, film and animation industry. The possibilities of animation production and creation in Maya are endless and it is difficult to overestimate the power of this software. However, because it is only designed specifically for animation, importing or integrating external media files from various applications would prove difficult as well as in importing the dynamics of that element. (Hailey, 2004)

3 Conclusion

Throughout the computer age, technology has become more powerful, and so have the authoring tools we use to interactively communicate information and entertainment, these tools providing animated interactivity on various limited to its capabilities. In considering the current capabilities of current multimedia and authoring tools, information technologies are developing at a rapid pace and advertising, gaming and entertainment are the industries that have exploited multimedia to the fullest.

4 References

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