

Computer Animation: A Multimedia Technology

Shoma Paul

Unitec New Zealand

shomapaul@yahoo.com

1 Introduction

Multimedia is one of the most fascinating and fastest growing areas in the field of information technology. It is a presentation of different Medias like the digitally manipulated text, videos, graphics, animation, photographs and sound. With the help of multimedia software and technologies more than one media can be played synchronously either by computers or by any other electronic means. Presenting the information using the combination of the Medias helps the user to easily grab the information much easily and much interesting than using the text alone. (Vaughan, 2003)

Animation is a multimedia technology which is the main eye-catcher in a multimedia project. "*Animation by definition makes static presentation come alive*" (Vaughan, 2003) Animation is widely used in entertainment, corporate presentations, education, training, simulations, digital publications, museum exhibits and so much more. (Vaughan, 2003)

2 Description

Different tools are available to create animation in a multimedia project. Some of the tools used to create computer animation are PowerPoint, Adobe Flash and Autodesk (Maya)

Macromedia's Flash is a time-based development environment. It is used for creating animations on the web. Flash uses Vector graphics hence its file size is very small and quick in downloads. Also Flash file starts playing quickly and continues to play as they download; the quality of the image is also very good. It is scriptable. Flash uses Action Script scripting language for controlling flash behaviors. The shockwave flash file (.SWF) is compressed and can be cross-plat formed. (Vaughan, 2003)

Autodesk (Maya) is another powerful tool for creating 3D animation. It is a modeling framework and basically used for creating simulation in a distributed application. Maya has been used for numerous film, video, and videogame projects, including Spider-Man, the Lord of the Rings, etc (Zhou, 2004)

3 Comparison

Each tools has its own advantage and disadvantages. Tools has to be chosen depending on the type and complexity of animation application

Flash can be used to create 2D and 3D animations in both web applications and computer games using available editors and toolkit. The disadvantage is that to run the animation created by the tool, there must be corresponding plug-in. else the user will not be able to view the files created by flash.

Maya is used for creating very complex animation applications like in real time application or in distributing application.

4 Conclusion

There is nothing magic about animation. It is based upon the creativity of an animator who changes the appearance of the image using some geometrical and mathematical techniques Making animations is not a simple job but is a time-consuming and often frustrating process. Animation is expensive; also it increases the file size. Too much of animation in the project can slow down its performance. So animation has to be developed carefully and sparingly to achieve the greatest impact. However its application is increasing day-by-day as the people likes to live in a world of Fantasy and illusion.

5 References

- Vaughan, T. (2003). Multimedia : making it work (6th ed ed.). London : McGraw-Hill.; Berkeley, Calif. : Osborne
- Zhou, J. (2004). MAYA: Integrating hybrid network modeling to the physical world .*Transactions on Modeling and Computer Simulation (TOMACS)* New York, NY, USA : ACM from <http://portal.acm.org/citation.cfm?doid=985793.985796>