On Multimedia Teaching and Multimedia Software

Miao Zhi Fang and Xun Lu*

School of Computer Science and Technology
Shizi Street No. 1 158#, Suzhou, Jiangsu, China

Email: 1227402013@suda.edu.cn, luxun@suda.edu.cn

Abstract: Multimedia teaching in recent years, the rise of a new teaching method. In the multimedia teaching process needs the support of multimedia teaching software, the paper develops multimedia software standards, comparative analysis of the common multimedia development tool, and according to my experience its scope of application.

Introduction

Multimedia technology is developed only in recent years, a new computer technology, which uses computers to integrated multimedia information, including text, graphics, images, sound, video and animation, and so on, but it is also available in a variety of media in accordance with a predetermined manner to establish logical connections, to be integrated into systems with interactive capabilities. Media technology with its unique advantages in recent years has been rapid development.

Multimedia teaching software with other teaching media in the teaching process the incomparable superiority. It contains not only the teaching of all content, and takes full advantage of video, multimedia, image, vividly demonstrates the process of teaching, and implement interactive learning, aroused the enthusiasm of learners, teaching patterns, contents, forms, methods, means and the classroom teaching structure and even the educational thought and concepts have undergone significant changes.

Standard of multimedia teaching software

Multimedia teaching software for which pay attention to intuition, logical, creative, highlight the difficult and important.

Scientific standards requires the concepts involved in the multimedia teaching software, knowledge, accuracy and referencing, not biased, nor for errors. This is the slightest ambiguity shall not be.

Multimedia teaching software development after completion is for users, not only during the development process to meet customer expectations, and always from a user's point of view, type specifications, clear and concise as possible, pictures, art, beautiful sound.

Technical standards for multimedia teaching software for now have not been able to run properly, you can, and must also take into account good compatibility, easy to operate, with network capability these basic requirements, while also using animations, sounds, images and other multimedia is reasonable, interact properly. From a software engineering point of view, after the completion of a multimedia teaching software development, must be provided with help documentation and operation demonstration purposes.

For a network multimedia teaching software, in addition to must comply with in addition to the above, there are higher requirements: development of multimedia teaching software for smaller, easy to run on different versions of the browser; open sharing of multimedia teaching software; interactive, timely feedback of information; furnished; high update frequency.

Multimedia education software development tools

We must first sharpen his tools, identification of multimedia teaching software development environments, development tools you choose will directly affect the software development process, influence teaching software of the final result and can even affect the software whether it can meet user needs. Thus, at the start of the development of careful, scientific research is essential, especially when the choices and development environments and development tools more many aspects one should carefully consider.

At present, on a number of multimedia teaching software development tools, PowerPoint and Authorware, FrontPage is the most common, now let us compare and analyze their respective characteristics.

easy PowerPoint. PowerPoint is an excellent presentation of the software, you can easily enter text, pictures, tables, organizational charts, etc. PowerPoint also provides simulation and animation capabilities of the slide. It is easy to use and fast to get started, as a multimedia educational software maker software is very welcome.

In PowerPoint edit page, you can use the insert "text box" (horizontal, vertical two) purpose, teaching input in the form of analysis, focal points and difficulties, lesson contents, and so on. In bold font, color, and even some flashes symbol (such as a Flash bulb pictures in Gif format) in order to achieve a prominent, beautiful and Visual effects. Authors can also lectures usually collect related information such as pictures, music, sound, video, organically inserted in multimedia teaching software in order to give full play to the advantages of multi-media.

Image, vivid, beautiful is that PowerPoint made you feel. It as a slide show software, the main function is "demo", so is ideal for making teacher demonstrates simple multimedia teaching software of their own.

Flexible interaction Authorware. United States is Macromedia's Authorware icons and flow line based multimedia authoring platform, Authorware, with its wealth of functions and procedures control multimedia enthusiasts alike. But to really drive the functionality of Authorware is not as simple as command and PowerPoint. Its greatest feature is interactive, its interface, press the appropriate button (that is, hot spot, hot objects, and so on) to access the appropriate content.

Teachers in Authorware, you can maximize the freedom of creation, apart from General presentation using PowerPoint can finish, and Authorware functions can also be used to design experimental puzzles such as multiple choice, fill in the title, subject, and built a small test, randomly selected students ' mastery of classroom content.

For teachers, timely and comprehensive understanding of students ' knowledge; for students, make learning and practicing together. Both fully embodies the advantages of multimedia teaching. LAN school teachers in producing good multimedia teaching software on the server on the host computer or school teachers, students in class or on other machines on time, ready to enter the multi-media teaching software for review and practice. Teachers can use Authorware object of knowledge (Knowledge Object) functions in most subjects in a book or a set of textbooks into interactive, multimedia educational software, packaged produces an executable EXE file, put it on the teacher's computer, students through campus local area network multimedia teaching software, which greatly facilitate the learning of students.

However, Authorware support for networking there is insufficient to have subtle animations on multimedia teaching software, you must insert the. AVI format video files, Authorware already relatively large body of multimedia teaching software "bloated". Authorware is suitable for making more complex, more interactive multimedia teaching software for large.

Network star FrontPage. Making Web pages easy software to get started is to FrontPage 2000, although its function than other professional-grade Web page creation software such as Flash less, but the intuitive interface and ease of use than FrontPage 98 has also been greatly improved. The interface and the Word similar, usage is also rather similar to, so very easy to use.

Teachers can be a page, section or chapter of the course content into a site to save editors produced a series of Web pages on the new site, on the home page of the appropriate location type objective, focal points and difficult points of teaching, course content words analysis, select these words, and inserting hyperlinks, click on these words will be able to access the appropriate content for the page. At the end of these pages by adding "back" or "home page", the words ", also used the subpage in the form of a hyperlink back to the main page, so that the interaction between the page. This and Authorware application main interface and interactive access to the contents of some similarity, but FrontPage 2000 accessibility is obvious.

In the making of multimedia teaching software, can directly insert animated Gif animated pictures in a Web page, and let the page move; in FrontPage 2000 Gif animation pictures can book an appointment at any time, or even replacing, which is an advantage for Web page design. Also the emphases and difficulties of teaching make scrolling marquee on the page, prominently promoted, not forget to enable students, improve the efficiency of having lecture.

PowerPoint and FrontPage 2000 to create multimedia educational software by, unable to design complex interactive exercises. But its advantage in its network capability, teachers make good web multimedia teaching software on their computer; class through Campus LAN, with direct access to the Web page of the multimedia classroom, even via the Internet and teachers at other schools.

Conclusion

PowerPoint easily making simple of teachers itself demonstrates of multimedia teaching software, for computer level relative lower of discipline teachers using; and Authorware of using needs must of fumble, and learning, constantly lessons learned, to played its powerful of interactive, and even II times development of powerful function, recommended computer professional teachers auxiliary discipline teachers making has strong interactive sex of exercises multimedia teaching software; and FrontPage of advantage is its powerful of network function More easily master control, suitable for making multimedia teaching software for distance learning, for the construction of local schools have a lot of practical value.

Acknowledgements

Reference

[1]. L. Toral S, Barrero F, R. Mart ńez-Torres M. Interactive multimedia teaching of digital signal processors[J]. Computer Applications in Engineering Education, 2007, 15:88–98. DOI:10.1002/cae.20110.

[2]. Walsh J P, Sun J C, Riconscente M. Online Teaching Tool Simplifies Faculty Use of Multimedia and Improves Student Interest and Knowledge in Science[J]. CBE-Life Sciences Education, 2011, (3):298-308.

[3]. Pita C, Eleftheriou M, Fern ández-Borr ás J, et al. Generic skills needs for graduate employment in the aquaculture, fisheries and related sectors in Europe[J]. Aquaculture International, 2014.

[4]. Wei Y, Yan H, Bie R, et al. Performance monitoring and evaluation in dance teaching with mobile sensing technology[J]. Personal and Ubiquitous Computing, 2014, 18(8):1929-1939.

[5]. Berk R A. Multimedia teaching with video clips: TV, movies, YouTube, and mtvU in the college classroom[J]. International Journal of Technology in Teaching and Learning, 2009, 5(1): 1-21.

[6]. Jigang C, Shixing W. The introduction of multimedia technology into the reform of the traditional methodology [J]. Foreign Language World, 2003, 6: 001.

[7]. Hu M, Xu S. Research of Multimedia Teaching on Principles of Management[J]. IERI Procedia, 2012:666-670.

[8]. Dai W, Fan L. Discussion about the Pros and Cons and Recommendations for Multimedia Teaching in Local Vocational Schools[J]. Physics Procedia, 2012:1144–1148.

[9]. Zijiang Z. On Multimedia Teaching[J]. Journal of Beijing University of Chemical Technology：social Sciences Edition, 2007.

[10].   Rosset A, Ratib O, Geissbuhler A, et al. Integration of a Multimedia Teaching and Reference Database in a PACS Environment[J]. Radiographics, 2002, (6):1567.