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Executive Perspective

By

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Introduction

One of the key promises made by Web technologies is the ability to deliver information to users almost anytime and anywhere. With the continued take up of IT within organisations, businesses and in the home, the 'digital revolution' has spread beyond the technophiles and is now providing a vision of 'digital learning'.

The opportunities of 'digital learning' haven't been lost on government, education or media publishing companies. With society being increasingly driven by the 'knowledge economy', everyone recognises the importance of learning and the need for it to be a fundamental part of everyone's lives.

'Digital learning' is seen as the cornerstone of providing learning to everyone. As Greg Dyke of the BBC states, "...the real significant aspect of digital learning is not the proliferation of content, it is the promise of interactivity".

Delivering the vision of 'digital learning' is harder than people first give credit for. Today's online course materials need to connect to Learning Support Environments, be able to successfully operate on many types of computer, operating systems and web browsers. They must also cope with the many bugs that exist in different versions of user's installed web technologies.

While numerous vendors are now successfully developing Learning Support Environments, the development of online course material is prone to many technological difficulties and high project risks.

3 Tier Systems

3 Tier Systems' vision is "run anywhere educational content". Specialising in developing "enterprise" software that can support thousands of concurrent users, 3 Tier Systems has developed a set of 'best of breed' software and tools that address the specific challenge of how to deliver highly interactive online courses that can seamlessly integrate into Learning Support Environments.

By using platform independent Java technology, 3 Tier Systems set about developing technology and tools that enable the development of course material that can be deployed on a large variety of hardware and software configurations with maximum interactivity. The system developed is called EAGLE - the "Educational Authoring Graphical Learning Environment".

Fit for Purpose

EAGLE is especially designed for the development of course material. With EAGLE, courses can now be developed with amazingly high levels of interactivity. As an indication of the power of the system, we have demonstrated course materials containing live word processors, spreadsheets, paint programs and fully interactive games. These all operate over the Internet and are all universally accessible regardless of the platform, operating system or web browser.

Through its built in LSE interoperability technology, EAGLE is able to automatically connect to leading Learning Support Environments - enabling content authors and developers to fully concentrate on creating digital educational material for use over fixed or mobile networks.

There are many other technologies built into EAGLE including; skinnable user interfaces that change both the control layouts and the look and feel of content; compression technology to minimise the effects of slow network connections, an audio engine and many more.

Flexibility

- EAGLE benefits from a built-in assessment engine supporting multiple-choice, open ended, true/false, form filling, complete a word, drag and drop and more. The matching of student responses, recording of results to LSE and subsequent branching are fully automated.
- Supports the development of course material for all users regardless of ability, age, experience, and physical ability. For example, using the mouse as a pointing device and for dragging objects.
- The productivity of the system. The ease at which content can be manipulated allows for rapid course creation and delivery.
- Our unique compression technique allows the system to respond to inputs and displays new information rapidly.
- Skinnable interfaces allow content to be branded without any changes to content files.
- Using purpose built development tools, content author and training provider can ensure that the training is always up to date. All files can be edited via Note Pad if necessary.
- Due to our innovative file size compression techniques, we can support graphics, video and sound. Video clips, sound and music files, as well as 3D animations, can all be included in EAGLE's web based training.

Benefits for Service Providers

Service providers moving into the growth area of web based learning are particularly concerned that a proliferation of technologies will make it impossible to support their customers in a cost-effective manner.

Supporting a large number of users requires installing multiple server infrastructures, maintaining those infrastructures and preserving compatibility alongside performance. With a potential for many users, all with their own computer systems, operating systems and web browsers, being a service provider can easily become an impossible job.

Using EAGLE for the development of learning materials can make big inroads into solving these problems and, with its proven technology, can substantially reduce project risks in new commissioned projects.

Benefits for Content Authors

With EAGLE, authors can create software applications that can operate within a diverse set of browsers, operating systems and devices. Additionally, using different skins reduces the costs of developing content for multiple providers. This provides authors with the flexibility to create educational content, while maintaining backward compatibility. This flexibility makes installation easier and, therefore, the applications become more attractive to service providers.

Conclusion

As the lead innovator in educational authoring software, 3 Tier Systems understands, in depth, the requirements of the market. That's why we are committed to developing, promoting, and implementing a single educational engine that can be used by a wide variety of web browsers, operating systems, devices and applications in today's Internet world.

We believe EAGLE is a first grade architecture for use in the development of course materials and offers true freedom to authors and the software developer in creating learning material.