New Software for producing Internet based e-learning packages.

Abstract

Templates produced using Xerte (a computer language) created by Julian Tenney at the University of Nottingham, make it possible for teachers and lecturers with the minimum of technical knowledge.to produce web-based materials for students to use independently. The way in which these materials work make them suitable for use in Intranets and for external use on the Internet – with the advantage that they can be shared widely. This article shows how to make Xerte modules and gives some examples.

Introduction

When Ben Church thought up the idea of having a teaching resource on the ESTA website which is now called GEOTREX we limited the offerings to Word documents and PowerPoint presentations because they were all that we could handle. It is noticeable that most contributions have followed the same pattern with the addition of Acrobat files. This e-learning program will give us the ability to offer a different style of package having free-standing modules that can be accessed by students independently. The content and nature of the modules can be very wide. They could offer an introduction to a new topic, some extra breadth of knowledge to a topic being covered or as a revision exercise. The design of the Templates allows for students with learning difficulties to access them with the possibility of enlarging the print and screen size or having the text narrated.

Instructions

Xerte is an open source program and can be downloaded for free from:

www.nottingham.ac.uk/xerte/

The version that gives you templates is v2.15, but beware because there is another download on the same web page for Xerte on-line toolkits. You only need to have the program installed on the machine that you use to write the modules, the only software that the students will need is a browser. When you have installed the software, make a folder on your desktop with a descriptive name (fossils1, volcanoes….) that will hold the files that the program creates. Each module will need a new folder.
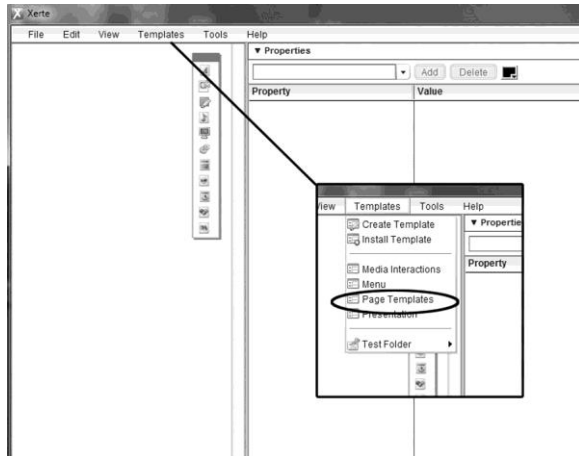
Image1. Screen grab showing the Template menu

Open the program and choose the 'Page Templates' option from the Templates menu. You will then be prompted to open a folder. Choose the folder that you have just created. The program puts a set of files into that folder and then prompts you with 'do you wish to open the project?' – to which the answer is 'yes'.

A new window opens called Xerte Template Wizard.

Table 1. Page types in Xerte Template Wizard

Text	Media	Navigators	Charts	Interactivity	Miscellaneous
Title page	Graphics and Sound	Column page	Basic chart	Stimulating question	Google map
Bullets	Drawing	Tabbed navigator		Interactive list	Flickr slideshow
Orientation	Video	Accordion navigator		Multi choice question	RSS feed
Plain text	Audio slideshow	Slideshow		Hotspot image	Wikipedia article
summary	Transcript reader	Button navigator		Interactive diagram	YouTube feed
	Image viewer			Annotated diagram	YouTube video
	Synched video			Timeline	Delicious bookmark
	Flash animation			Gap fill	
	Ispring movie			Categories	
	Jing movie			Dialog	
	Captivate movie			Drag & drop	
	Xerte content			Quiz	

Table 1. Page types in the Xerte Template Wizard

The first page of the Wizard is the title of the learning object. There is an insert button to put new web pages into the module. When you press the insert menu a drop-down list of options appears. These give access to a wide range of different styles of presentation. The details of the page styles that are available is given in Table 1. Hovering over a choice in the Wizard gives a sample of each kind of page. Examples of page styles appear in the sample modules that have been written to show what can be done. The addresses for these modules are given later in this article.
If you decide to remove a page you can use the delete button in the Xerte Template Wizard window.

To see how your new pages look, press the play button at the bottom right of the window. A new window opens which is what the student will see. The only parts of this window that do not work properly in preview mode are the screen size control and the font size control. They do work, however, when the module is finished. To return to the module, close the preview window.

You can save the module at any time and return to it at a later date. Simply open the Xerte program and from the File menu choose 'open'. Go to the folder where the module is stored and open it. Choose 'Learning Templates' as the file type and from the files pick 'template.rlt' to open. You will be returned to the Xerte Template Wizard with your constructed pages in it.

When you have finished constructing your module it will need to be placed on the Internet in order to work properly. To get it ready for the web, use the Publish heading on the Wizard menu and choose publish. All the files needed for it to work on the Internet will be created. The whole folder is uploaded and is accessed by adding the folder name at the end of the web address. A folder called fossil1, uploaded to www.peteracademy.ac.uk would be accessed as: www.peteracademy.ac.uk/fossil1/

If you do not have access to an Internet site then ESTA will host the module for you. Simply email me at webmaster@esta-uk.net and make Xerte the subject. You can also use this email address if you get stuck and would like some help.

Tricks

The program is poor at putting white space into the web pages. When the module is uploaded it will miss out any white space that you included. This means that your clear layout will get squashed together and new lines and new paragraphs will disappear. The trick is to type in <br> every time you want a new line on the web

page and to type

 if you want a paragraph break. (Using this makes you a real programmer!)

The second problem is with displaying lists. Every item in a list has to have in front and at the end. A list of faults would be entered as:

dip-slip
reverse
strike-slip
oblique-slip

Would be shown on the web page as:

dip-slip
reverse
strike-slip
oblique-slip

You may be tempted to have a look at your module with a browser before you have it uploaded. Browsers do not like to look at files that are on the same machine – this is one of the things that viruses do! You will probably get a warning message and the module will not appear as it will when it is uploaded.

Sample Modules

To test how easy it is to create materials using this program I used a guinea pig (Maggie Williams) and together we wrote 5 modules as examples. The first module took some time but we quickly found that we speeded up. You are free to use our modules as you wish. The addresses of the 5 modules are:

http://pcwww.liv.av.uk/~hiatus/metamorphism/

http://pcwww.liv.av.uk/~hiatus/minerals/

http://pcwww.liv.av.uk/~tjpeter/fossil/

http://pcwww.liv.av.uk/~tjpeter/granite/

http://pcwww.liv.av.uk/~tjpeter/time/

Resources

The web site: www.nottingham.ac.uk/xerte/ as already mentioned also contains useful information about Xerte and examples.

http://www.techdis.ac.uk/getxerte has information on Xerte templates with pdf instructions.

Xerte modules can also contain video clips. The website at: http://www.techsmith.com/Jing/ has a free piece of software called 'Jing' which will produce short video clips off your screen.

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