Software Review

Software: Lersus: e-learning authoring tool

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This is a review of LERSUS < www.lersus.de >, an authoring system that creates interactive tutorials, computer-based training (**CBT**) courses and web-based training courses (**WBT**). The appeal of Lersus is that it revives the tradition of the authoring systems and languages that were commonly used in the 1990s to produce educational and multimedia materials, but have only occasionally been used for the internet. According to its creators, Lersus is based on the three principles:

- **Model-based Authoring**
  Now you don't need to build your pages by templates. LERSUS allows you to specify the didactical structure, the layout and design as well as the end formats (such as PDF, HMTL or XML) at the beginning of the authoring process in the model.

- **Standard compatibility**
  The content produced with LERSUS is compatible with all usual eLearning standards: SCORM 1.2, IMS-LOM, QTI

- **Multimedia and interactivity**
  LERSUS facilitates the combination of instructive contents with multimedia and interactive components

Basic features

Once users are familiar with this new environment, the advantages become evident. One of its advantages is that each and every element in the course is easily accessible. Lersus organizes contents hierarchically, so users always have a clear idea of the structure of the course as they access the different parts.

Materials created with Lersus are based on **didactic models** that define their structure. Lersus has a tool to check whether the contents that users create are consistent with the model; if not, users are alerted to the fact and can make the necessary corrections.

This means that users can create series of courses in the knowledge that all the courses follow the same model and are therefore homogeneous.

Lersus offers only one predetermined model which we can see in the following chart:
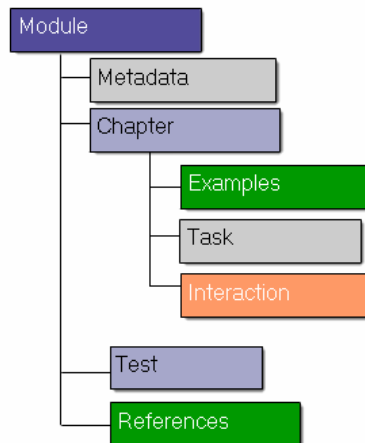
All the elements this model includes (Metadata, Chapter, Examples, …) work in the same way, facilitating the incorporation of texts and multimedia elements. This **incorporation of multimedia elements** is in fact another of the highlights of the software, since from a set of simple menus users can add graphs, tables, tables with graphs, links, videos, flash animations, audio, and so on, which Lersus will later export efficiently to the web.

Texts can be included by importing or pasting from another application. The format is preserved accurately (bold, italics) and any images in the text are incorporated – though the system does not distinguish between fonts, and in fact it seems to maintain text in a particular font and font size.

It also allows creation of **Tests** following the same intuitive mechanics, in a range of forms: Multiple Choice, Multiple Answers, True/False, Matching, Essay, Ordering, Fill the blank, etc.

Once the course is finished and the teaching model has been validated, Lersus offers the possibility of publishing (exporting) it so that it is visible, or transportable as metadata. Another of the system's strong points is that the course **can be exported in three formats**: XML, HTML and PDF.

The web version is interactive, as planned in the programme, allowing navigation between sections and interaction between the various activities. The web version provides access to a **printable version** in PDF format. This PDF document has an initial table of contents which introduces each of the sections in the course, and markers which reproduce the hierarchical structure of the course.

One of Lersus's weaker points is the rather limited help section, which is more an introduction to the product than a system designed to make the use of the software easier.

Another weak point is the UNDO option, since it can only be implemented for certain actions such as deleting text: it cannot restore an element eliminated by mistake.

Strong points:

Lersus's main advantages are its **easy integration** in Learning Management System (LMS) systems and the power and reliability of its export system to the web.

Unlike other tools for the creation of interactive courses, Lersus's work environment in local mode provides maximum flexibility and power when incorporating different materials such as text, images, video, flash animations, and so on. However, courses generated locally and then exported to the web are obviously static, and do not allow the kind of internal communication (forums, internal messages, or calendars and so on) offered by platforms for generating online courses, such as Moodle or WebCT.

But this is not really a limitation; in fact it is Lersus's own authoring approach. Lersus is a powerful tool for the creation of interactive courses, which can then be manipulated in any of the three formats it can export to (HTML, XML and PDF). So it is easy to move a course from one web environment to another, or, for instance, to send a course by email in PDF format.

Conclusion

Lersus is a good solution for the creation of interactive materials that meet all necessary standards. The fact that it has didactic models for validation allows users to standardize and implement patterns for the creation of series of courses with a similar structure, though this of course is a limitation in courses with more complex architectures.

The export systems make Lersus a very good option for those wishing either to integrate courses in a virtual learning setting or to maintain them independently.