eTechniques for Teaching

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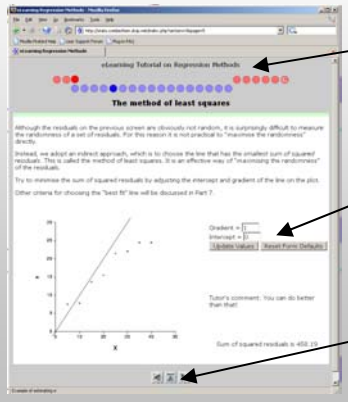
http://stats.combechem.slyip.net/

Interactive and Accessible

Both to view and to edit

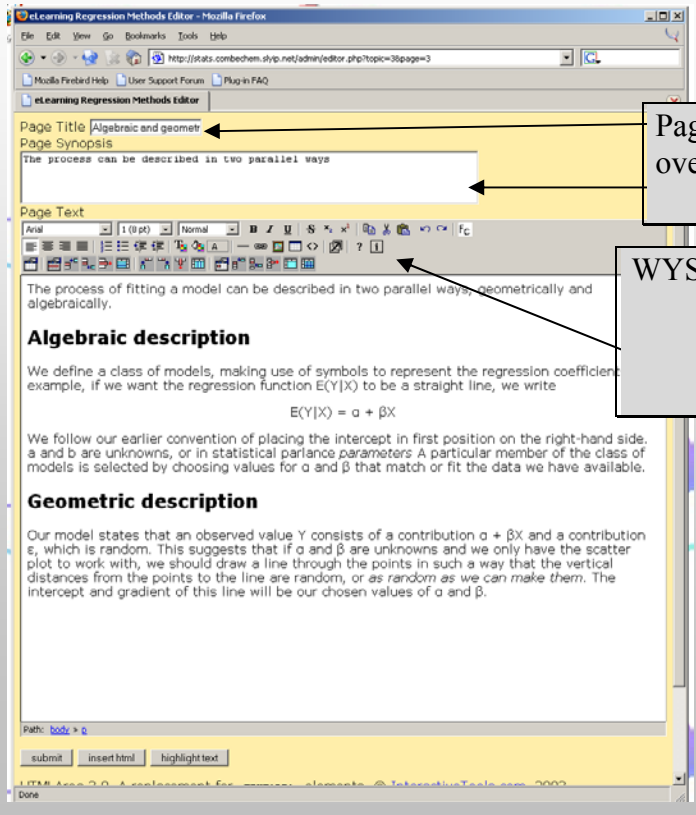
In an electronic world people want access to information when convenient to them, and whilst most people will tolerate a simple install procedure, they don't want the hassle of installing loads of programs to achieve a single goal. In a teaching environment the best tool for learning can be by doing, in an electronic environment it is possible to incorporate interactive examples into the learning material.



Content Management and Targeted Scripting

Empowering the knowledge specialists

Traditional websites rely on the publishers producing HTML formatted documents, or producing scripts that generate these. In recent times using WYSIWYG HTML editors has eased this, but generating interactive content still generally relies on knowledge of a web programming language. By using a content management system, the editing and HTML generation can be moved onto the web server making quick edits more convenient and knowledge of server systems redundant. By careful specification of the teaching material it is possible to integrate other programming tools into the web server, hence allowing the content provider to produce interactive material in a language familiar to them and more appropriate to the sites content.



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Designed with the User

For the user!

The design of the tool is a result of a Joint Application Development session at IBM Hursley, with a selection of the target users alongside the knowledge providers. The outcome of this was collated and circulated to gain further comments, before being passed onto the site developer. Throughout the focus is on giving the users the tool they want, and the knowledge providers the tools to produce it.

Browser Compability

Reducing the Platform Barrier

During the specification stage of the teaching tool, it was noted that the end users of the tools will be using a range of browsers on a range of operating systems. Hence it is necessary to keep the HTML used in the site standards compliant. The use of an online editor is helpful with this, as it allows us to guide the HTML that people use.

The Database Key to Content Control

Performance and Manageability

The tools content management system is built around a Relational Database backend, this stores all the page text saving the need to have files directly editable by the webserver, hence making the site more resilient to abuse by other users of the server. When serving many concurrent requests, the database can provide a significant performance increase. By using web-forms, the site operators can control who has edit rights, without having to rely on the server administrators, reducing the load on central resources.