WYSIWYG - More or less

by *Fernando Berzal Galiano*

Windows, **i**cons, **m**ouse, and **p**ull-down menus shape **WIMP** interfaces. They are designed to keep the user distant from the complexities of the underlying operating system. They facilitate the work of professional users while learning curves are softened for new users.

The development of applications for windows environments is, however, much harder for programmers. As a result, new tools are required to improve their productivity. **R**apid **A**pplication **D**evelopment (RAD) environments meet that goal. For example, X Windows programming for UNIX applications, whether using Xlib or Motif, is considered an arduous task. Have you ever tried scripting languages like Tcl/TK or CDE Desktop KornShell? They help in some extent, but not too much. Fortunately, a new generation of RAD tools will make our lives easier.

You should keep in mind that windows programming is not restricted to Microsoft Windows programming. There is much activity in other environments such as UNIX: KDE (**www.kde.org**) and GNOME (**www.gnome.org**) are just two examples. There is also a growing interest in platform-independent windows programming such as Project SWING (JavaSoft, **www.javasoft.com**), and Qt (Troll Tech, **www.troll.no**).

Apart from building windows applications using a particular language such as C/C++ or Java, an increasing trend to use the Web as front-end for new applications can also be observed. Banks, utilities and other companies all around the world now use HTML forms and Internet browsers to build their client applications while all the business logic makes an intensive use of middleware (e.g., CORBA) and is kept in Java applets, scripts, or CGIs/servlets.

Welcome to the world of windows, where what you see is what you get - more or less. Although post-WIMP interfaces are yet to come (see [**1**] and [**2**]), WIMP interfaces are the best we have at our fingertips nowadays. Let's get the most out of them!

References

1

Gentner, D., and Nielson, J. *The Anti-Mac Interface.* Communications of the ACM, 39:8, August 1996, pp. 70-82.

2

Oviatt, S. *Ten myths of multimodal interaction.* Communications of the ACM, 42:11, November 1999, pp. 74-81.