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CODING

Modern programmers

by Chris Keegan, Climax

CLIMATICMOMENT

In politics, they are the bearded, hand-wringing liberals. In comics, they are parents with new-age, gender-stereotype breaking pretensions and long-suffering children (let's call them Tarquin and Guinevere). And, in real-life, they are the imbibers of holistic medicine, those people who meet regularly with their homeopath and are prescribed infinitesimally small doses of some arachnid fluid, tarantula juice, whatever, to allay their worst fears and calm their anxious mind.

(It works. Really!)

And these days, in software, they're the proponents of Agile Development methodologies – programmers wearing stereotypical cardigans (purely for illustrative purposes) and, like so many before them, espousing a better world doing things their way. Tune into their mailing lists and you'll find them respectfully 'taking each other's point' (at great length), but disagreeing vehemently about the most subtle implementation detail, or vying with each other over whose book has sold more copies – and, crucially, whose methodology can react to last minute changes in fundamental requirements later in the development cycle.

Software development is a tricky business, and games development doubly so, especially in the current environment. Panaceas are often not what they at first seem to be: there aren't any shortcuts. Will pair programming save your project? Will holding all of your meetings standing up improve the quality of the software? How about using a device that dictates who has the right to talk in a meeting – what does that achieve? Or regular code reviews: will doing those get the game shipped on time?

There's a long list of methodologies, processes and procedures to help you (or confuse you), from Extreme Programming to SCRUM, to the Capability Maturity Model. They all have something to offer software development; pair programming, for instance, works really well under some circumstances (actually pair designing works really well, and pair programming less so in my experience). Being flexible in your approach to development in the games industry is the mother of all pre-requisites, and a good understanding of software development processes is essential, if only so you know what is not necessary.

But there's only one thing that will get your game shipped on time, guaranteed, and that's a focussed team of game developers who all want to get the game shipped on time by working together.

That's it, nothing more. Simple really. Can we all go home now?

■ **www.climaxgroup.com**

Rethinking project management

Swedish vendor Hansoft has a solution that promises to keep your project on-schedule and on-budget, says **Jon Jordan**…

Product Hansoft
Company Hansoft
Price 25€ per user, per month with support
Contact

■ *Hansoft tracks resource usage and breaks down tasks to team members*

■ *Managers can drill down to find problem areas – a Find function checks for overdue or incomplete tasks*

Within a development environment swamped with tools, technology and plug-ins, it's surprising there hasn't been more attention paid to production management. But the gap between the extremes of Post-it notes and Microsoft's much-maligned *Project* is slowly being filled.

Microsoft itself is working on a new approach, with the integration of *Visual Studio* into the XNA toolchain to create XNA Studio. There are other contenders, however. Already bloodied in the development of Starbreeze's *The Chronicles of Riddick*, *Hansoft* is the result of Swedish game developers not being able to find an appropriate tool, and so deciding to create it themselves.

"My two fellow co-founders felt the biggest challenge was not doing upfront planning, but rather handling constant changes," says Hansoft MD Patric Palm, "so they started to develop a tool that could handle it."

The resultant Windows-based application is based around the concept of tracking the workflow of all project members – so-called resource usage.

On one level, this means the members of a development team all know what they should be doing, as they are allocated work through a *Hansoft* client. Milestone alerts and progress reports can be automatically emailed, increasing everyone's awareness.

As tasks are completed, these actions are then propagated throughout the system, providing managers with an overview of progress and any problems that occur.

Clearly, such a system has to be straightforward to use.

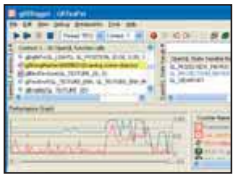
"I think it's the most important argument for most companies," Palm says. "With *Hansoft*, you get a fast and easy tool that supports not only the daily work of project managers, but the whole organisation. Game programmers and designers are very demanding – they don't accept tools that don't add value to their daily work. This is vital to understand, because no project tool will materialise its potential benefits if it isn't used by everyone in the company."

With more outsourcing and remote team working likely required to get next gen games completed on-time and on-budget, the need for such solutions is only going to increase.

"We will see larger and more matrix-oriented organisations, with specialised cross-production units in future," Palm agrees. "This means the co-ordination of resources will be more complex, since projects will suffer from constant changes and delays."

■ **www.hansoft.se**

gDEBugger v2



Price $490
Company Graphic Remedy
Contact sales@gremedy.com

The first new version of the OpenGL API debugger *gDEBugger* sees the addition of two profiling views: a performance graph view and a performance dashboard view. These provide different ways of displaying information, Windows and specific graphic boards, so you can more easily spot graphic pipeline bottlenecks. Data includes graphic memory consumption, CPU/GPU idle states, the utilisation of vertex and fragment processors, and the number of function call per frame. You can save out the counter data as a CSV file for further comparison.

■ www.gremedy.com

DirectX 9.0 SDK Update

Price Free
Company Microsoft
Contact +44 870 6010100

Microsoft has released the latest version on DirectX, and it contains plenty of goodies liking PC and Xbox 360 development. One is XInput; an API that enables Windows applications to receive input from an Xbox 360's controller. Another is a cross-platform version of Xbox's *XACT* audio design tool, which is now available as a beta. Also released as a beta is the 'Managed DirectX for Whidbey' (*Visual Studio* 2005). This offers the first support for the 2.0 Common Language Runtime in DirectX, and includes features such as generics.

■ http://msdn.microsoft.com/directx/sdk

Unigine v0.33

Price From $495 for commercial usage
Company Unigine Corp
Contact sales@unigine.com

One of many low-cost Windows/Linux-based engines arriving from Eastern European technology companies, Unigine Corp continues to work its way towards its planned major 0.4 release of *Unigine*, which will add networking and AI components to the offering. In the meantime, potentially interested developers can check out the current 0.33 tweaks, with Precomputed Radiance Transfer lighting and a distributed PRT map generation tool as well as faster rendering and compiler optimisation being added to the already impressive list of lighting, physics, GUI, workflow tools and a scripting engine.

■ http://unigine.com