Java Business Expo

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Given the deadlines of writing a monthly column, it may surprise you that I found some new products that will help you write better programs at the Java Business Expo, way back last December. This show, held in New York in December has grown from insignificant (where wags said that a cannon shot would hit neither an exhibitor nor an attendee) to a nice-sized trade show of useful Java products. This was not a huge glitz-covered extravaganza paralyzing a city, like Comdex, nor even as large and vacuous as PC Expo. Instead, this was a focussed exhibition where a few hundred Java vendors came to show off some very interesting new products. The nice thing about the show was that you actually got to talk to knowledgeable people, some of whom were the actual developers.
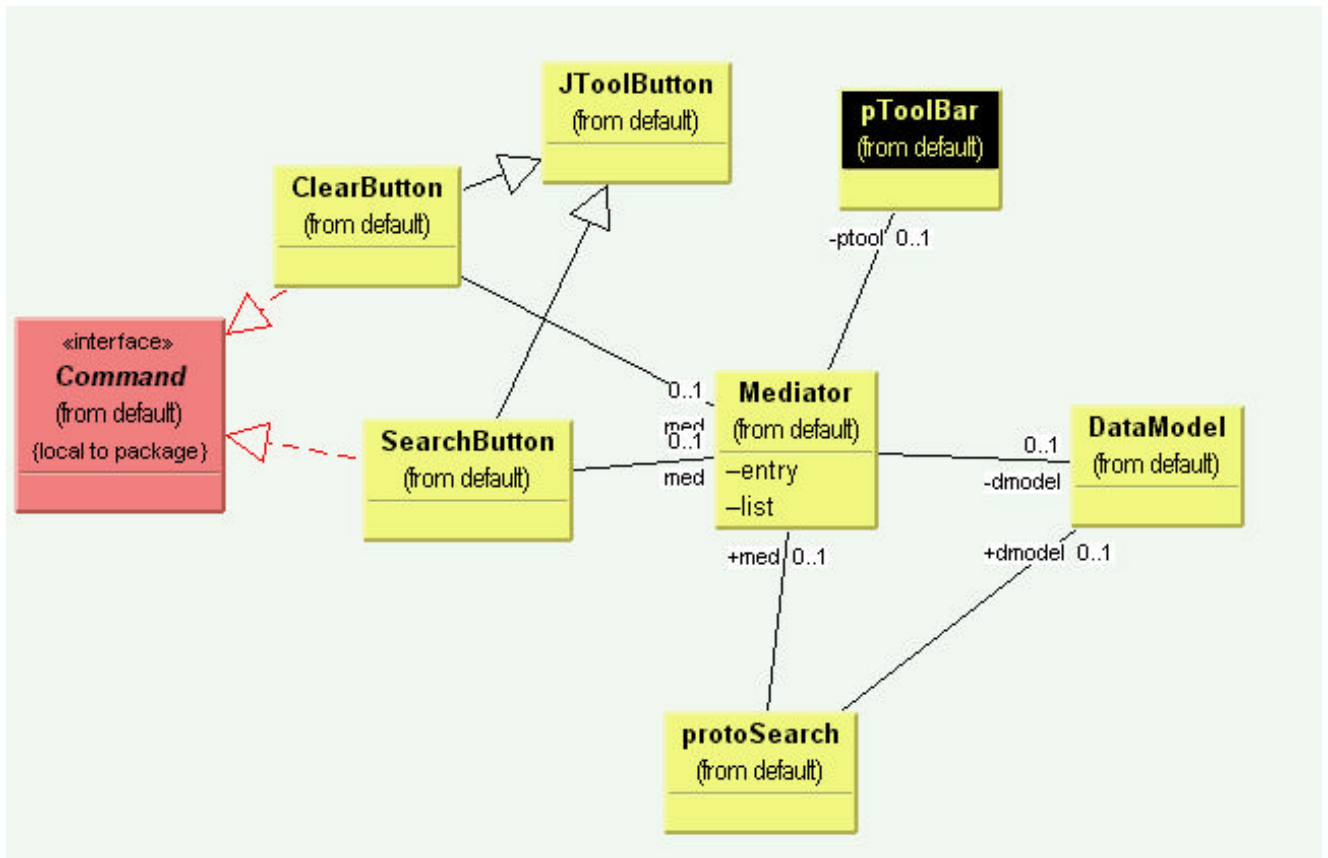
The biggest news, of course, was that Sun used this show to launch the Java JDK 1.2, which they re-christened "Java 2." (Let's see if that moniker holds up.) Lots of the vendors had little placards indicating their endorsement of the new Java version, and their compatibility. In addition, Sun was showing their latest release of the Java plug-in, which finally seems to have gotten its performance in line with expectations. It loads and executes at an acceptable rate now, and does provide a way for users to make sure that their browser actually supports the latest Java features.

However, if you walked through the show floor looking carefully, you would find a number of quiet product presentations of some very interesting Java products.

One very nice new product I looked at is called *NetBeans*, a complete Java integrated development environment, itself written entirely in Java. It was developed in the Czech Republic, but don't take this as a criticism: this is a really sophisticated product. Unlike Sun's ill-fated Java Studio, this is a powerful product including an elegant toolbar, a visual design form editor which includes the Swing components, and a simple, intuitive interface. It also includes a complete visual debugger. One of the significant selling points of NetBeans is the code it generates from the form editor. The code is simple and completely readable, unlike some of the horrors generated by the other major Java IDE vendors.

Best of all, you can download and try this product for free. You only pay the $145 fee if you then use it to develop commercial products with it. However, since it runs purely in Java, be sure that you have plenty of horsepower and the very latest JIT compilers before trying it out. A terrific new product at www.netbeans.com.

Lotus also showed a simple new web site builder called *FastSite*. It really doesn't have much to do with Java, but I was impressed that it could import and convert files to HTML from all the major word processor and presentation packages(Word, WordPro, WordPerfect, PowerPoint, Freelance, Excel, 123, Quattro Pro.) This could be a really handy $99 product for a lot of things. You can order it from their web site. (www.lotus.com).

Two new products are competing in the Java UML world: *JaVision* and *StructureBuilder*. UML is the new standard for representing relationships between classes, and you will be seeing a lot of it in months to come. For example, in Figure 1, we represent a Mediator class:
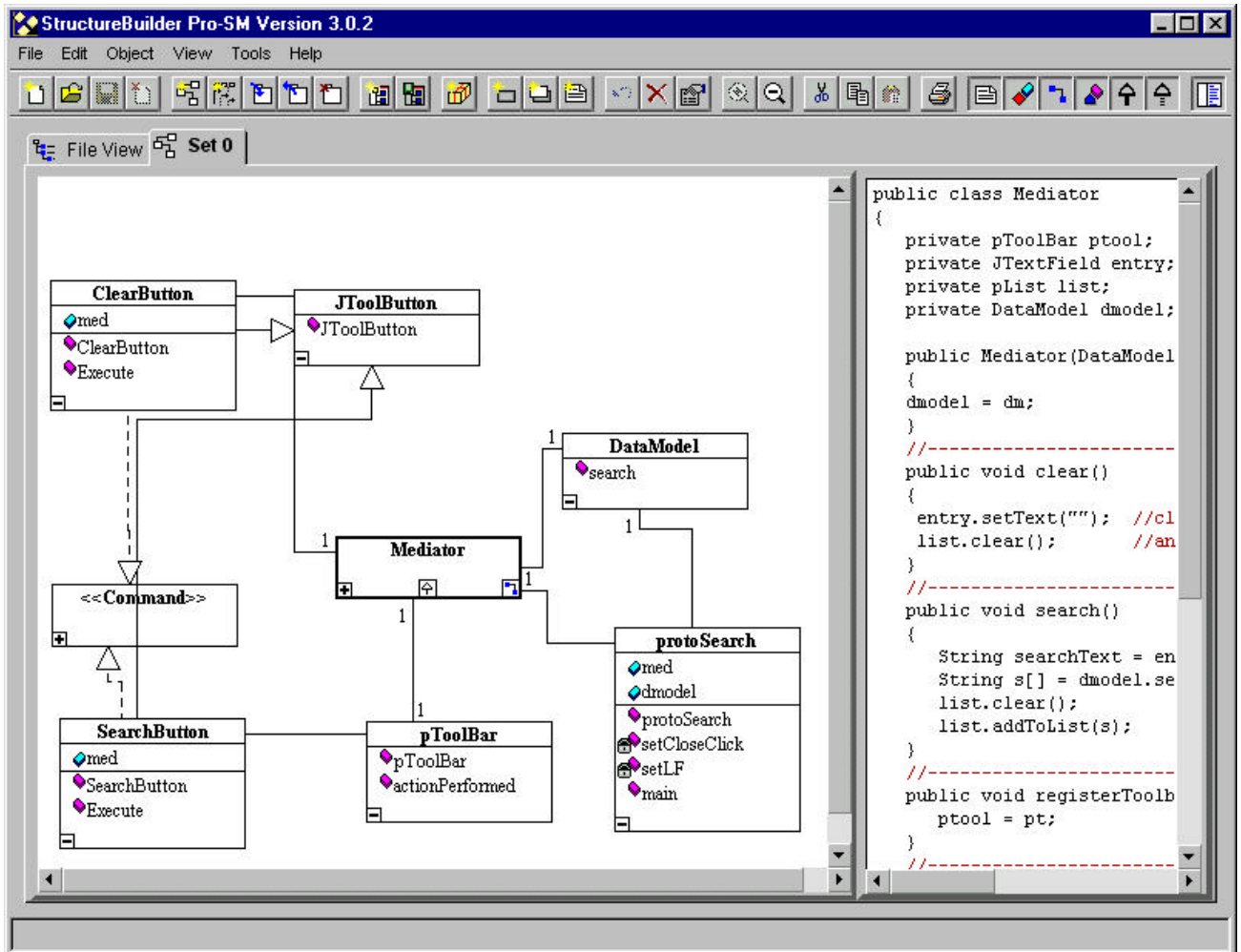
Figure 1: A UML representation of a Mediator class, as drawn by JaVision.

Briefly, you can see that the ClearButton and SearchButton classes implement the Command interface and both inherit from JToolButton. You can also see that these buttons communicate with the Mediator class, which in turn communicates with the DataModel and with the ProtoSearch class. There are many layers of sophistication to UML and this is only the first of them, you can clearly see its utility.

The important thing about Figure 1 is that it was drawn by JaVision automatically, just be reading in the example code from my November, 1998 column on the Mediator pattern. JaVision is a powerful way to produce easily-understood diagrams of your Java objects without having to draw anything yourself. You can use it to explain your code to your workgroup or to someone joining a project. You might even find it helpful in understanding your own code, and rearranging objects to a more powerful design. You can download a free 30-day trial version of JaVision from www.object-insight.com, and you can buy it right thereon the internet for only $99: a real bargain. My only quibble is their licensing scheme: it is tied to a single computer and they make it quite difficult to run it on both your desktop and your laptop without buying 2 copies. On the other hand, it *is* only $99.

At a somewhat higher level, you'll find *StructureBuilder,* a complete Java generation tool that will allow you to start with your object diagrams and generate a complete set of Java classes. StructureBuilder will also represent quite a number of more sophisticated UML elements, and in its upper level versions can even draw sequence diagrams of how the code executes.

In using StructureBuilder, you can change the code and see the diagrams change and vice versa. You can use this great tool as a design aid to get your class structures right and discuss them with others.

You can also use it to read in existing code and examine its class relationships in UML as we illustrate in Figure 2 for the same Mediator pattern. Note that in this diagram, we show a few more of the public methods. This can be expanded and collapsed in StructureBuilder, while it is a View option in JaVision.

Figure 2. The Mediator pattern as drawn by StructureBuilder.

There are 3 versions of StructureBuilder, the base version, the Pro version and the Pro-SM version for $695, $995 and $1995. You can download a trial version of this powerful package from their web site at www.tendril.com. This is a great package and I see it

being used to generate book diagrams as well as in team development. One other thing it did that I really liked was generate complete JavaDoc comments for your Java programs. (of course you still have to explain what they do, but all the boiler-plate typing is taken care of for you.) Instant documentation while you watch!

The KL Group was showing JProbe 2.0, a pretty sophisticated Java perfromance monitoring tool for finding the speed bumps in your Java program. According to the demonstrator, performance frequently degrades when you somehow forget to release all instances of a class, so that it can't be garbage collected. This tool makes this easy to spot.   You can get more information as well as an evaluation copy from www.klgroup.com/jprobe.

You can't go a tradeshow without hitting some oddities. In the spirit of the NY Times Apples and Onions awards, I award a whole bushel of onions to Informix, who had an obnoxious trio belting out some incredibly corny lyrics about Jazz and Java with a thumping recorded accompaniment that made conversation with nearby vendors just about impossible. This racket went on every half hour or so and was not only out of place, it had nothing to do with their products. I also note that this makes it really difficult on the hearing impaired, who have enough trouble in crowds without their noisy contribution.

One other surprising exhibitor was Saab, who was exhibiting their spiffy 9-3 convertible along with a drawing for a free one. Their purported reason for attending was that they had recently successfully completed an update of their legacy information systems to a new client server package constructed by CTS, IBM, Lotus, Microsoft and Sun. But they were really there to sell cars. However, even with my press badge, I couldn't get them to send me an evaluation copy.