Tech Notes

JBuilder® 2008: Back in the Swing of Things

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JBUILDER PUTS YOU BACK IN THE SWING OF DOING SWING

Have you forgotten just how much fun and easy it can be to build Java Swing applications?

Have you ever heard or said Java Swing is hard to use because:

- There are too many bugs in the Swing API;
- You need too many workarounds to get things working like you want;
- The whole Swing architecture is a bad design;
- The Swing event handling is lacking in many ways;
- There is no good Java™ IDE around for designing a Swing app;
- You have to code the whole GUI code from scratch, or;
- The Eclipse Visual Editor does not know how to handle my complex Swing apps and ends up just hanging whenever I use it?

Even back in 2003, James Gosling has been quoted to say “The Swing toolkit is not simple...But it could be easy to use.”

Is Swing dead? In my opinion, Swing is not dead, it is alive and kicking. From www.ClientJava.com (a website I really recommend if you are interested in desktop oriented programming in Java) I found a blog entry asking Is Swing Dead. So is Swing phasing out, will the future be browser based? The votes from the site, including mine, so far are:

<table>
<thead>
<tr>
<th>Is Swing Dead?</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>7.90%</td>
</tr>
<tr>
<td>No</td>
<td>82.56%</td>
</tr>
<tr>
<td>Maybe</td>
<td>9.53%</td>
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</tbody>
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Swing development - in most parts - is all about desktop integration. Before web technology, every application was built desktop oriented, which in many cases was overkill to the application. However, even if you could code ninety percent of your applications as browser dependent solutions today, there still is a business need for the remaining ten percent.

You find the requirement for desktop oriented applications all over the place. Just keep your eyes open the next time that you check in at the airport, book into a hotel, pay for goods in a store or meet a sales person out of his office.

So, my vote to the “Is Swing dead?” question is no!
Java IDEs need to get back in the swing of doing Swing. What Java desperately needs is a great Swing GUI toolkit that’s as powerful and creatively inspiring as Flash but with the inherent maturity and power of Java.

Adoption of Java on the desktop is improving; big-name PC OEM bundling deals are being secured; and Sun’s Java Desktop (Linux with a bundled JRE) also appears to be doing rather well. To really win the desktop war, though, Java needs a built-in windowing toolkit which is more than just barely good enough. SWT isn’t it; it’s basically doing the same things as Swing using a different approach to rendering.

The good news is JBuilder 2008 on Eclipse now includes the Instantiations Swing Designer. The Instantiations Swing Designer is designed exclusively for the Eclipse framework. With the fully integrated Swing Designer, Java developers using JBuilder 2008 can quickly and visually create rich user interfaces, easily add controls using drag-and-drop, add event handlers to controls, and change properties of controls using a familiar object inspector. Unlike alternative solutions, the Swing Designer transparently handles code generation without proprietary markers or fragile intermediate files.

![Figure 1 JBuilder Swing Designer](image)

Java developers using JBuilder 2008 will now be able to quickly construct more sophisticated and reliable Swing-based graphical user interfaces (GUIs) that enhance the user experience for enterprise applications. In addition, JBuilder 2008 developers will have complete control over how they develop their GUI code as a result of Swing Designer’s bi-directional code generation, round-trip editing capabilities, and comprehensive support for Swing layouts, controls, containers, and other capabilities. Combining Swing Designer with JBuilder 2008 gives Java developers an unparalleled and powerful development platform.

The Swing Designer builds an abstract syntax tree (AST) to navigate the source code and uses GEF to display and manage the visual presentation. Using WYSIWYG layout tools, you don’t need to write any lines of Java code - the code will be generated for you by the designer. You
can easily add any control to a composite by using drag-and-drop, add an event handler to your controls, and change various properties of controls using property editors and much more. Generated code doesn't require any additional custom libraries to compile and run: all of the generated code can be used without having the Swing Designer installed. The Swing Designer can read and write almost any format and reverse-engineer most hand-written Java GUI code. It also supports free form code editing (make changes anywhere...not just in *special* areas) and most user refactorings (you can move, rename and subdivide methods without a problem).

So if you want to try the new Swing Designer or any of the other great tools found inside the Embarcadero Java line, download a trial of the software and give it a try. The JBuilder 2008 Enterprise trial can be found at: [http://downloads.embarcadero.com/jbuilder](http://downloads.embarcadero.com/jbuilder).

**ABOUT THE AUTHOR**

Al Mannarino is currently a Lead Systems Engineer and Evangelist for Embarcadero. Prior to transferring to Embarcadero, his last 9 years was spent as a Senior SE helping to sell Borland’s CodeGear and ALM/SDO solutions. Al has over 25 years of Software Development experience including OOAD and the responsibility for developing and deploying production applications. Prior to Borland, Al was an SE for Objectivity, Versant, Red Brick Systems, Information Builders, and an Electrical Engineer with Grumman Aerospace where he performed real application implementations on complex electrical-mechanical systems. Al has a BS in Electrical Engineering from Manhattan College.
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