Swing Explorer -
cool tool for Swing application developers

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Overall Presentation Goal

Learn how to make Swing application debugging easier with Swing Explorer tool
Speaker’s qualifications

Maxim Zakharenkov

System Architect at Exigen Services

Has a several year experience in Swing application development

Creator, maintainer and promoter of Swing Explorer opensource project

https://swingexplorer.dev.java.net
Sample application

![Personal data form](image)

- **Name:** John
- **Gender:** Male

Rating: 70%
JPanel pnlName = new JPanel(new GridBagLayout());
pnlName.add(new JLabel("Name: "),
    new GridBagConstraints(0,0,..)
pnlName.add(new JTextField("John"),
    new GridBagConstraints(1,0,..
add(pnlName, BorderLayout.NORTH);

JPanel pnlRadio = new JPanel(new GridLayout(2, 1));
pnlRadio.add(new JRadioButton("Male", true));
pnlRadio.add(new JRadioButton("Female"));

JPanel pnlGender = new JPanel(new BorderLayout());
Border b = createBorder(new EtchedBorder(), "Gender");
pnlGender.setBorder(b);
pnlGender.add(pnlRadio, BorderLayout.NORTH);
add(pnlGender, BorderLayout.CENTER);
Unexpected results

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http://swingexplorer.dev.java.net

www.devoxx.com
Wrong size & position

Wrong spacing!
Possible causes

- Border insets
- GridBagLayout insets
- Fillers
Something is missing

My radio button is missing!!!
Possible causes

- I've forgot to add it into a container
- Component is invisible
- Component has zero size
- Some other component is added on top
- Layout constraints are wrong
Component is painted incorrectly

Text is missing!
Possible causes

- Text coordinates are outside of bounds
- Text color is green
- Text is painted before the green rectangle
- <Free room for some your cause>
Standard Java debugger
Standard Java debugger does not fit well for debugging of Swing applications!

- Swing is a visual toolkit and its debugging differs from a simple java code
- Requires understanding of Swing architecture
- Requires special tools and techniques
Swing Explorer

- Tool for debugging of Swing Applications
- Free
- Open source
- Has integration plug-ins for NetBeans and Eclipse

https://swingexplorer.dev.java.net
DEMO

Swing Explorer
With Swing Explorer you can:

- Debug yours Swing Applications
- Research Swing internals
- Browse through component hierarchies
- Research Look and Feels
- Set up accurate default sizes for UI
- Check if UI sizes/positions correspond to standards
- Discover Problems with the Event Dispatch Thread
- Monitor AWT events
Conclusion

Swing Explorer is a free open source tool which makes Swing application debugging much easier. More information and usage hints can be found here:

https://swingexplorer.dev.java.net
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Q&A

https://swingexplorer.dev.java.net
Thanks for your attention!

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