WindowBuilder

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Programación de Aplicaciones Interactivas

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What will we talk about?

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What is WindowBuilder?

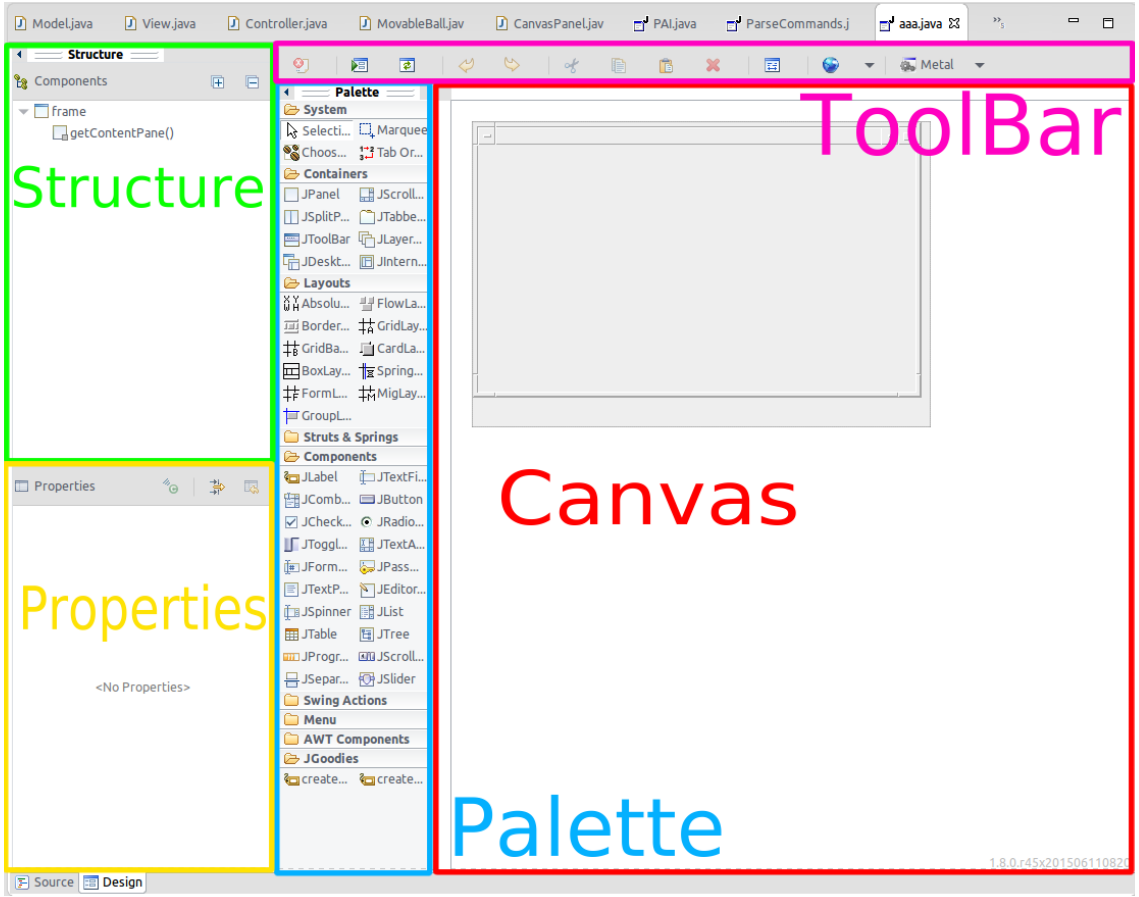
- Java GUI designer
- Makes easy creating complicated windows
- Visual Designer and Java Code
- Drag-and-Drop
- Add event handlers

Installation

- In Eclipse, click **Help > Install New Software...**
- Get the proper link from http://www.eclipse.org/windowbuilder/download.php
- **In the Available Software** dialog, enter the product's update site location and select all the items to install. Click **Next** to continue.
- Click **Next** to confirm installation.
- Accept the license agreement. Click **Finish.**
- Restart Eclipse.

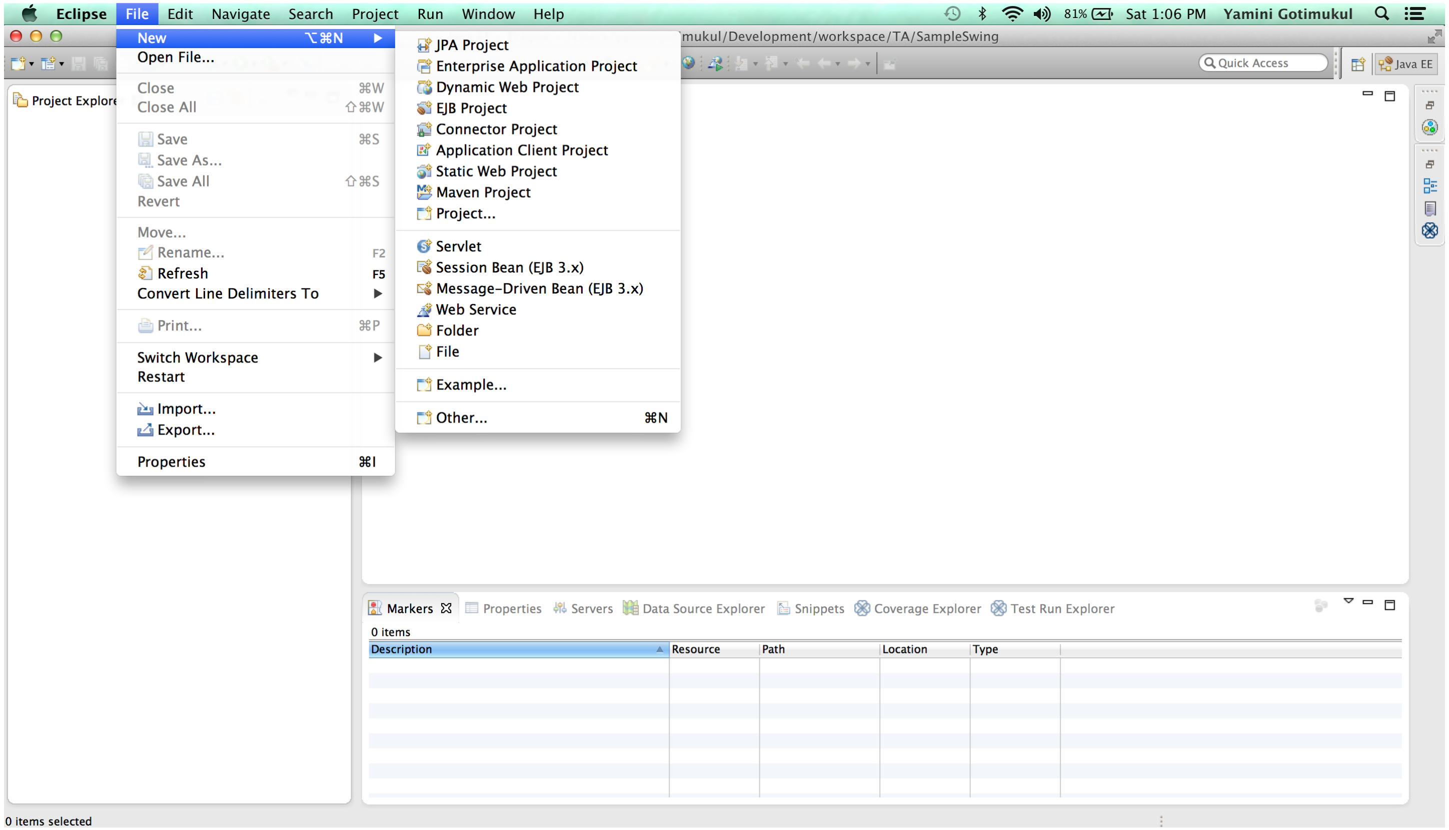
Distribution of the window

- Design View
- Source View
- Structure View
  - Component Tree
  - Property Pane
- Palette
- Toolbar
- Context Menu



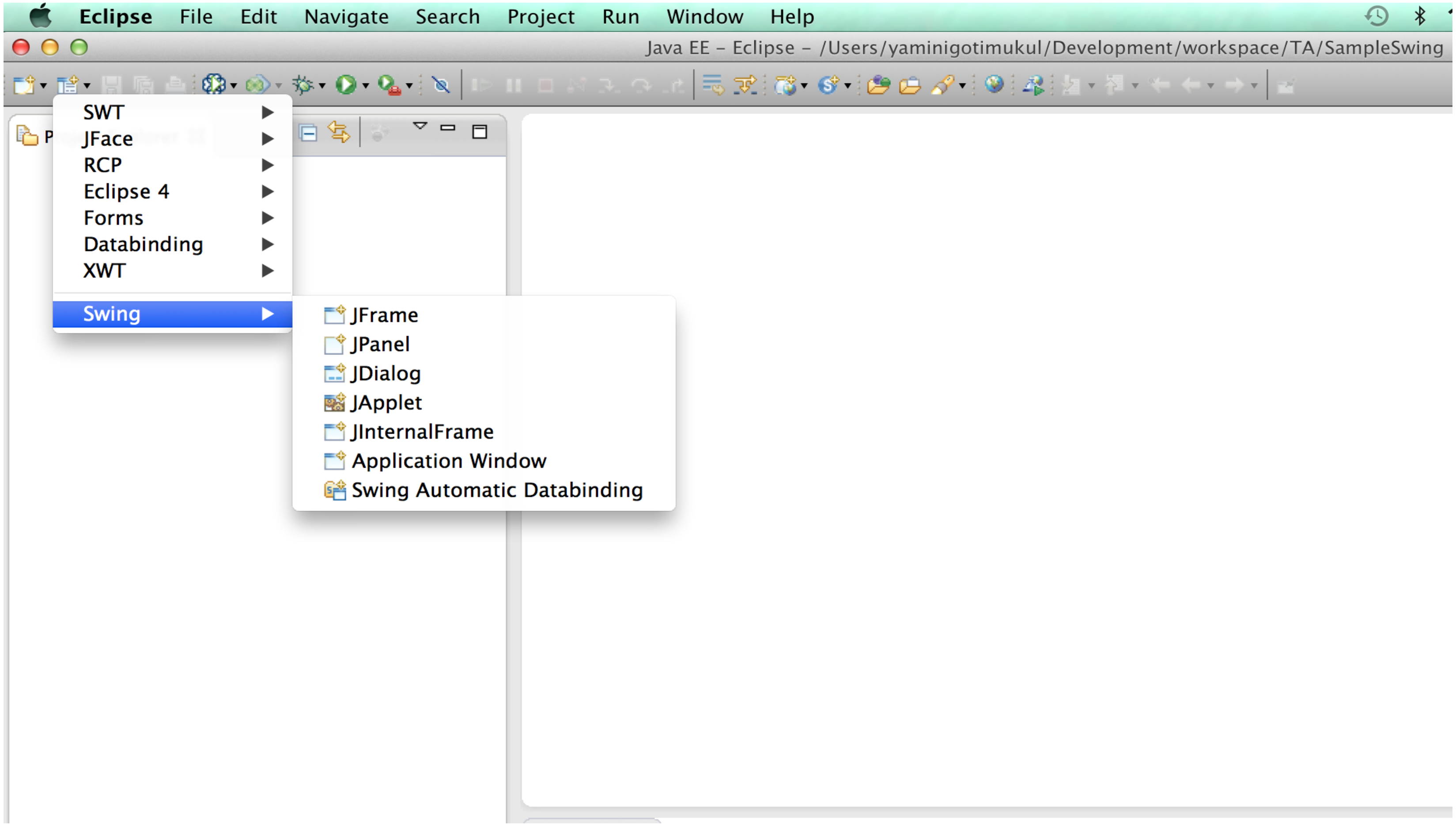
Short introduction for a quick start

Create a new project using the appropriate project wizard



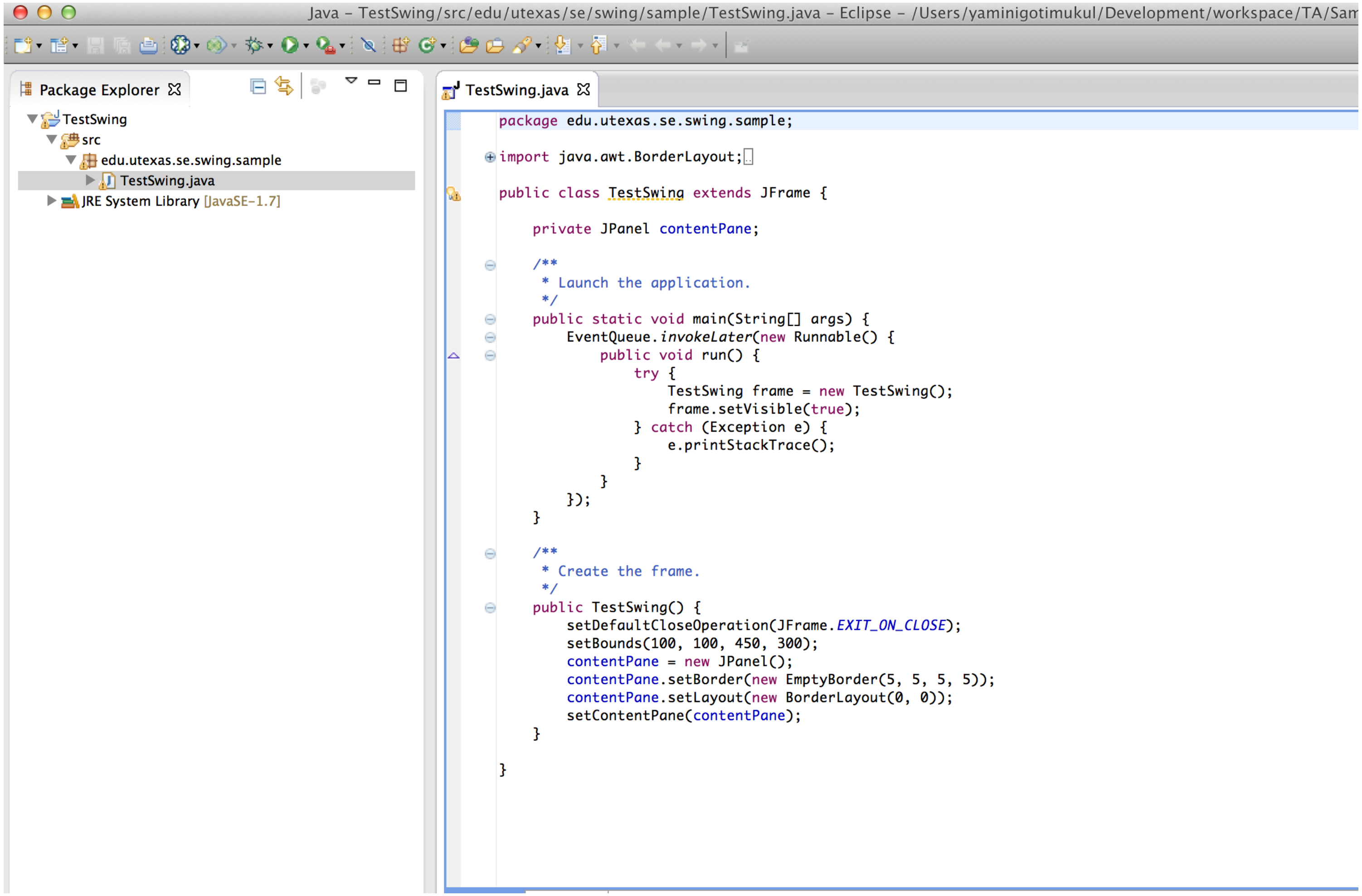
Short introduction for a quick start

Use class wizard to create your GUI window



Short introduction for a quick start

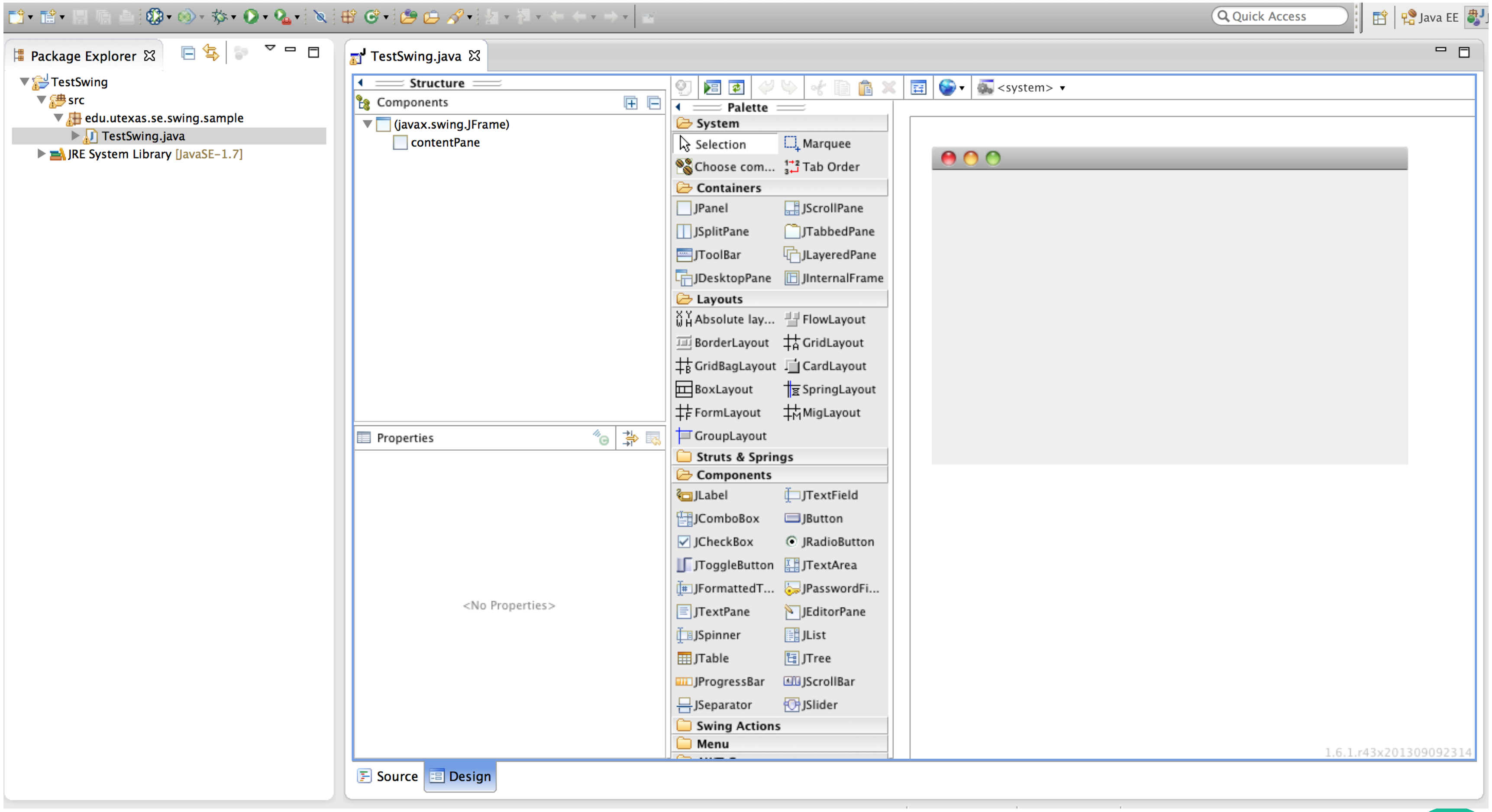
A class with some existing code is created.


Java – TestSwing/src/edu/utexas/se/swing/sample/TestSwing.java – Eclipse – /Users/yaminigotimukul/Development/workspace/TA/Sam
Package Explorer
TestSwing
src
edu.utexas.se.swing.sample
TestSwing.java
JRE System Library [JavaSE-1.7]
TestSwing.java

```java
package edu.utexas.se.swing.sample;

import java.awt.BorderLayout;

public class TestSwing extends JFrame {

    private JPanel contentPane;

    /**
     * Launch the application.
     */
    public static void main(String[] args) {
        EventQueue.invokeLater(new Runnable() {
            public void run() {
                try {
                    TestSwing frame = new TestSwing();
                    frame.setVisible(true);
                } catch (Exception e) {
                    e.printStackTrace();
                }
            }
        });
    }

    /**
     * Create the frame.
     */
    public TestSwing() {
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setBounds(100, 100, 450, 300);
        contentPane = new JPanel();
        contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
        contentPane.setLayout(new BorderLayout(0, 0));
        setContentPane(contentPane);
    }

}
```

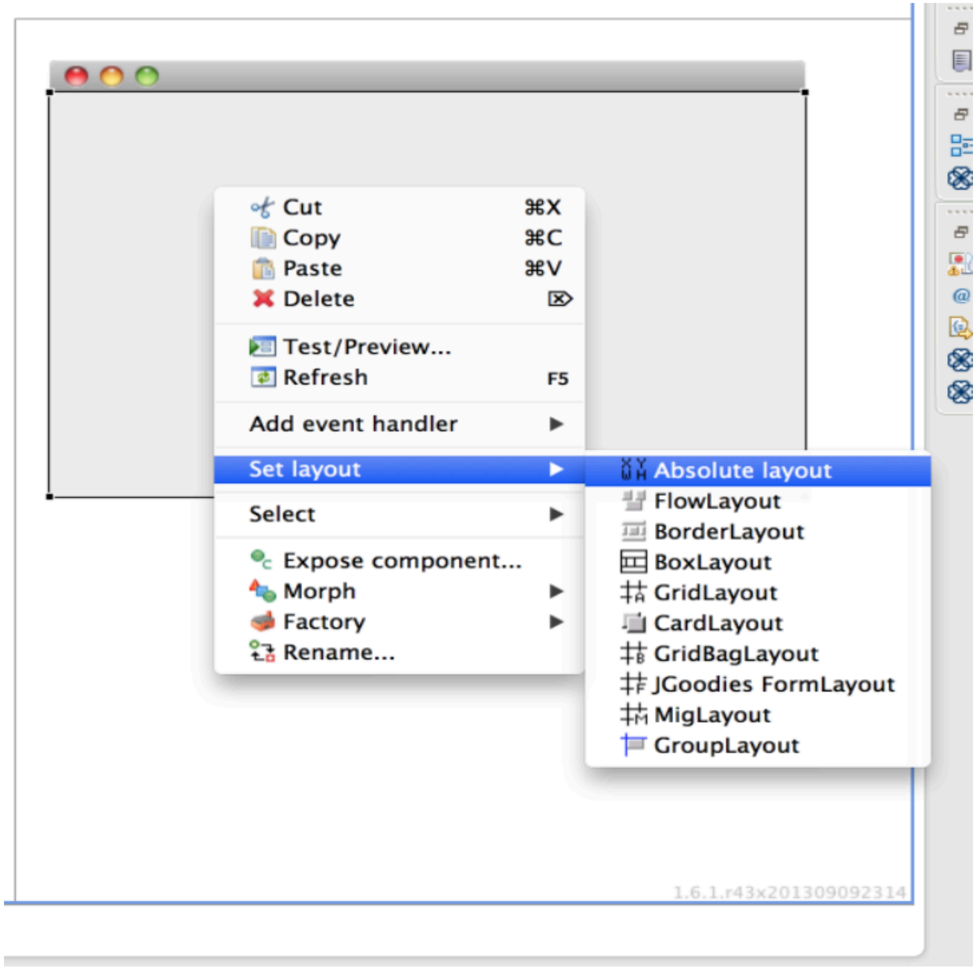
Short introduction for a quick start

To use the windowBuilder click on the "Design tab" at the bottom of the editor



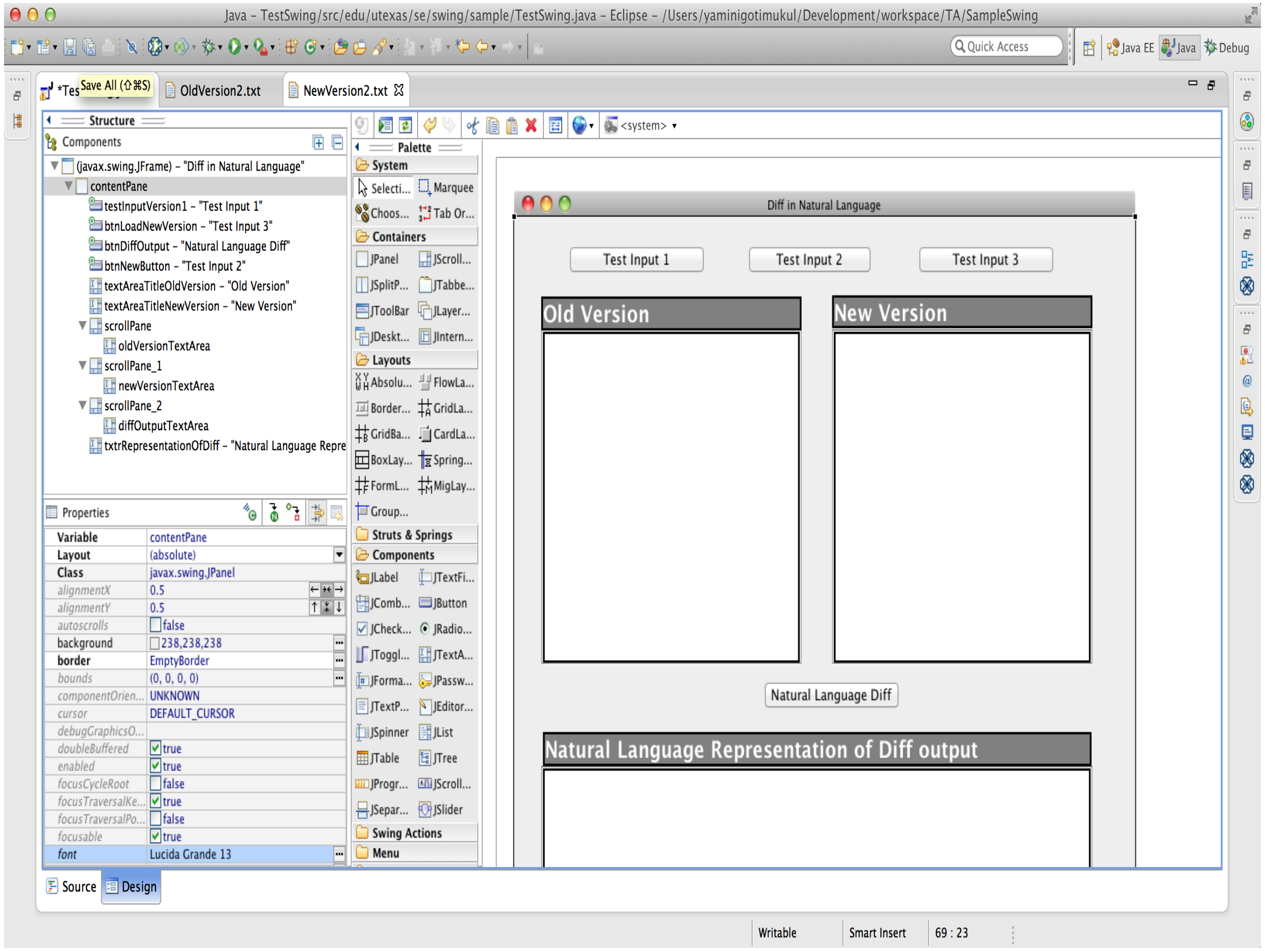
Short introduction for a quick start

To set layout, right click on the window frame and select " set layout " and select the appropriate layout



Short introduction for a quick start

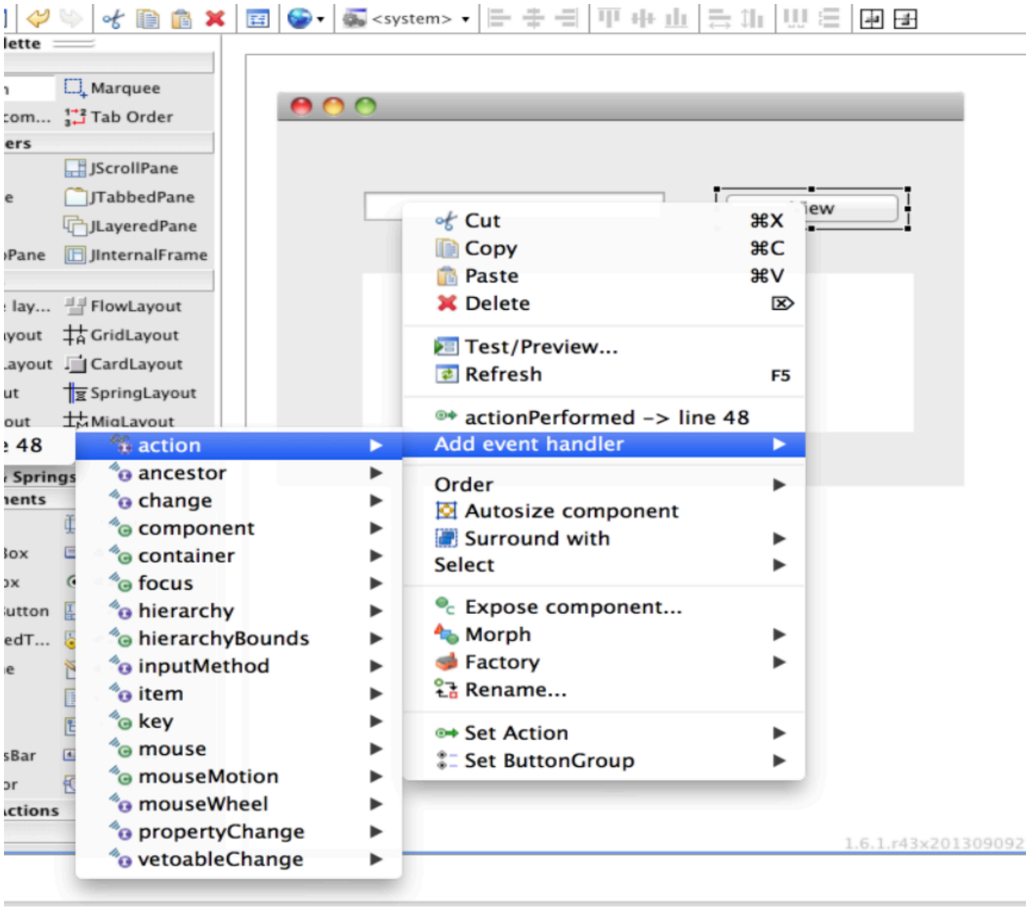
Add various components from the Palette and edit their properties using the Property Pane.



Properties	
Variable	contentPane
Layout	(absolute)
Class	javax.swing.JPanel
alignmentX	0.5
alignmentY	0.5
autoscrolls	□ false
background	238,238,238
border	EmptyBorder
bounds	(0, 0, 0, 0)
componentOrien...	UNKNOWN
cursor	DEFAULT_CURSOR
debugGraphicsO...	
doubleBuffered	☑ true
enabled	☑ true
focusCycleRoot	□ false
focusTraversalKe...	☑ true
focusTraversalPo...	□ false
focusable	☑ true
font	Lucida Grande 13

Short introduction for a quick start

Add event handler to various widgets to provide behavior



Short introduction for a quick start

Tips & Tricks

- Directly editing widget text in the design view
- Adding multiple widgets of the same
- Editing properties of multiple widgets at the same time
- Cofiguring the palette
- Editing advanced widget properties
- Reverting a widget property to its default value
- Hiding code from the parser

Features

Bi-directional Code Generation

- Directly generates Java code
- The tool can read and write almost any format
- Reverse-engineer most hand-written Java GUI code.

Features

Internationalization (i18n)

- Directly generates Java code
- The tool can read and write almost any format
- Reverse-engineer most hand-written Java GUI code.

Features

Custom Composites & Panels

- Embed any Composite of Jpanel subclass in another window.
- All widgets defined in the are isible in the window they are used.
- Access any widget exposed via public accesors.
- Access exposed custom properties
- Exposed widgets appear in tree with the “exposed” decorator

Features

Factories

- Create a static factory method from any widget
- Factory methods may be parametrized with one or more arguments
- Morph any widget into a factory instance
- Add any factory component to the palette

Features

Visual Inheritance

- Inherit from any Shell, Composite, JFrame, Jdialog, Japplet or JPanel subclass.
- All inherited widgets are visible
- Access inherited widgets exposed via public or protected accesors
- Access inherited custom properties
- Inherited widgets appear in tree with the exposed decorator

Features

Event Handling

- Adding an Event Handler
  - First way is trough the property pane
  - Second way is to simply right-click on a component, select add event handler.
- Deleting an Event Handler
  - Select the component tree
  - In the property pane, click the method you wish to delete and then press delete.

Features

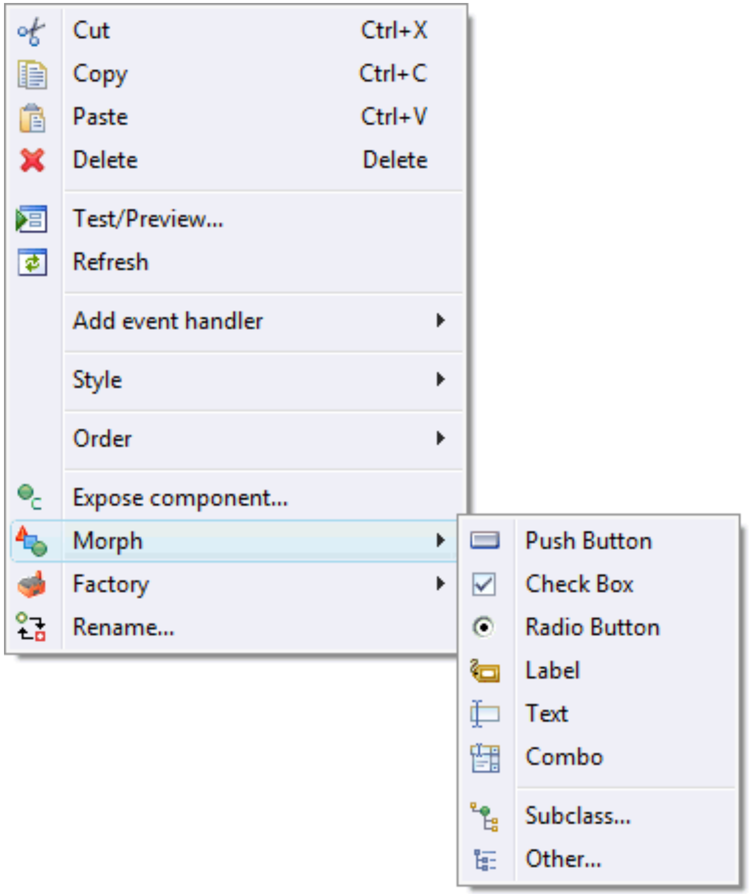
Menu Editing

- Menus are a must for just abaout all GUIs.
- Only SWT Shells, SWT Applications Windows, and Wing JFrames supports menubars.
- Each window can have at most one Menu Bar, and the only place that you can put a Menu Bar is directly on a window.

Features

Widget Morphing

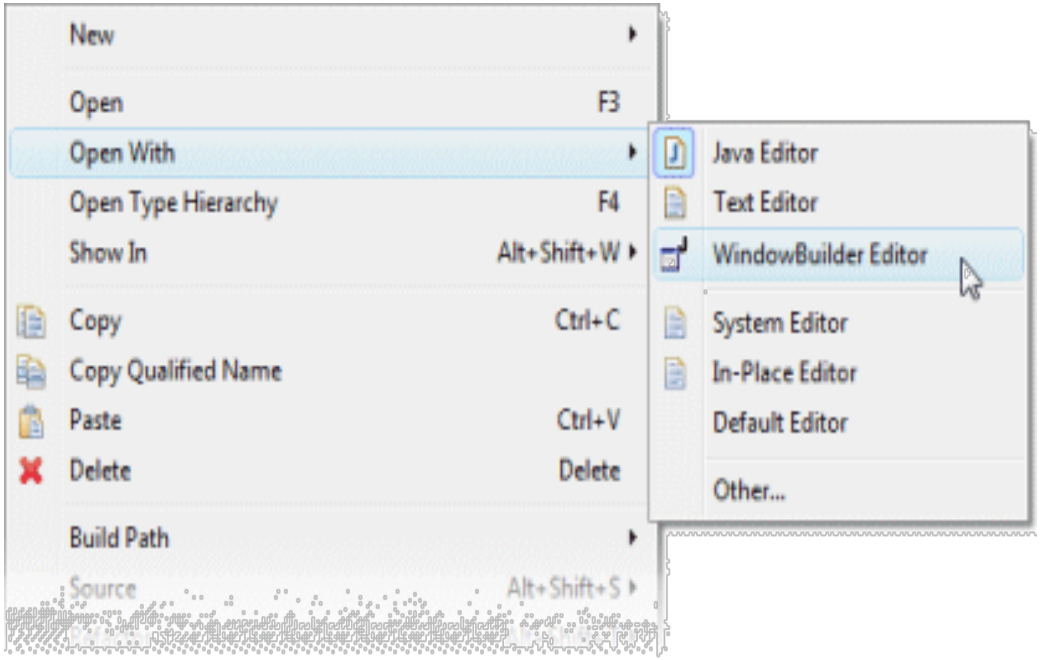
- The editor allows you to morph similar components from one type to another.



Features

Editing Existing Windows

Open a file that has not been created by the tool, simply right-click on the file and select Open With > WindowBuilder Editor



Data Binding

Wizards

- Swing
  - JFrame
  - JPanel
  - JDialog
  - JApplet
  - JInternalFrame
  - Application Window
  - Automatic Data Binding

Bibliography

- Help eclipse
- Eclipse windowBuilder
- Eclipse proposals windowBuilder

END

THANKS!

You can find as alu0100881677 & alu0100898293

Slides and code at Github repo

Any Question?