	Java Language						
Java Language	Java Language						

Tools & Tool APIs	java	javac	javadoc	jar	javap	jdeps	Scripting
	Security	Monitoring	JConsole	VisualVM	JMC	JFR	
	JPDA	JVM TI	IDL	RMI	Java DB	Deployment	
	Internationalization		Web Services		Troubleshooting		

Deployment	Java Web Start	Applet / Java Plug-in

User Interface Toolkits	JavaFX			
	Swing	Java 2D	AWT	Accessibility
	Drag and Drop	Input Methods	Image I/O	Print Service / Sound

Integration Libraries	IDL	JDBC	JNDI	RMI	RMI-IIOP / Scripting

Other Base Libraries	Beans	Security	Serialization	Extension Mechanism
	JMX	XML JAXP	Networking	Override Mechanism
	JNI	Date and Time	Input/Output	Internationalization

lang and util Base Libraries	lang and util			
	Math	Collections	Ref Objects	Regular Expressions
	Logging	Management	Instrumentation	Concurrency Utilities
	Reflection	Versioning	Preferences API	JAR / Zip

Java Virtual Machine	Java HotSpot Client and Server VM

Left brackets: JDK, JRE

Right brackets: Compact Profiles, Java SE API

Java (platforma)

Java platforma
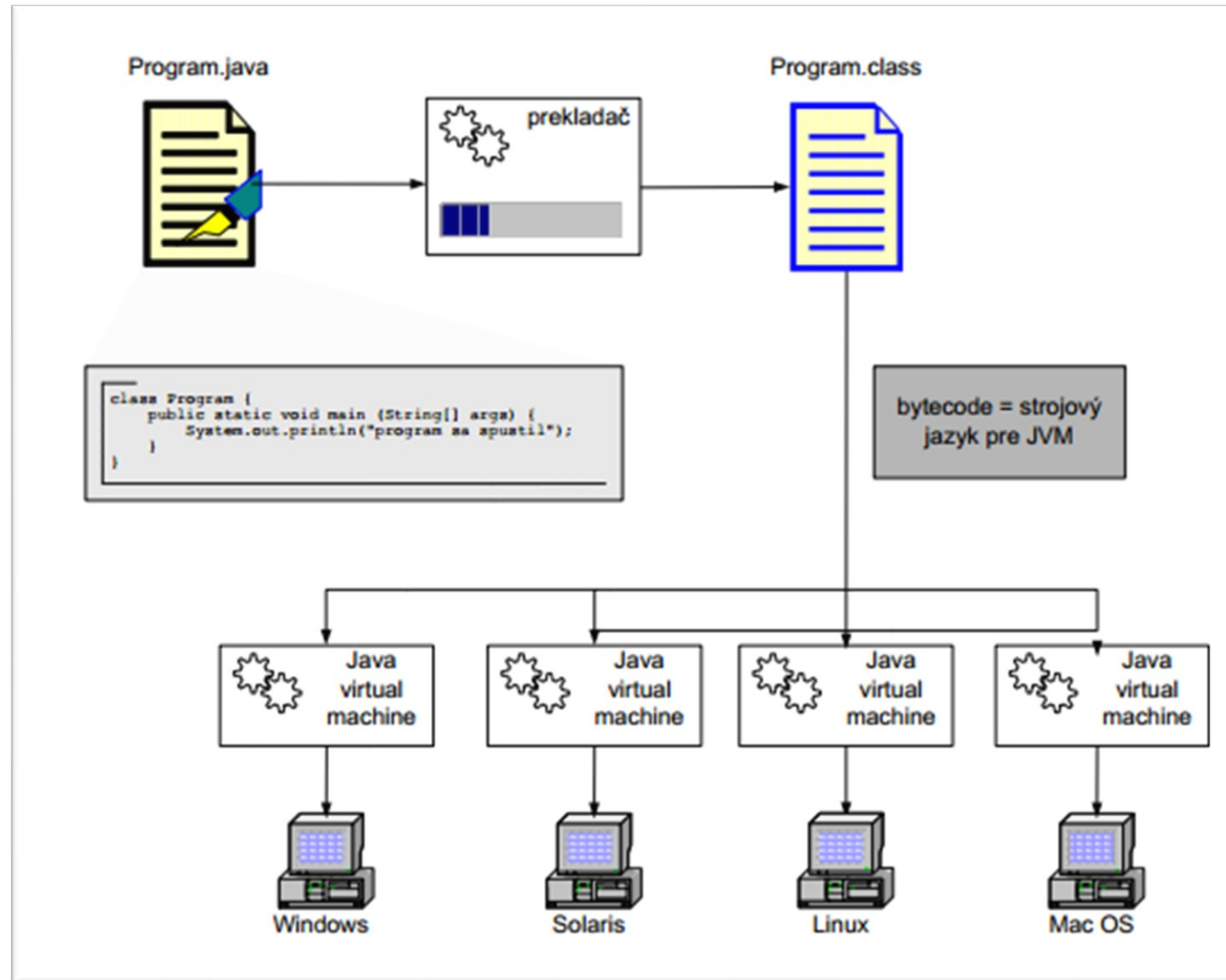
Google Java Style Guide

Table of Contents

1 Introduction

This document serves as the **complete** definition of Google's coding standards for source code in the Java™ Programming Language. A Java source file is described as being *in Google Style* if and only if it adheres to the rules herein.

Like other programming style guides, the issues covered span not only aesthetic issues of formatting, but other types of conventions or coding standards as well. However, this document focuses primarily on the **hard-and-fast rules** that we follow universally, and avoids giving *advice* that isn't clearly enforceable (whether by human or tool).

1.1 Terminology notes

In this document, unless otherwise clarified:

1. The term *class* is used inclusively to mean an "ordinary" class, enum class, interface or annotation type (`@interface`).
2. The term *member* (of a class) is used inclusively to mean a nested class, field, method, *or constructor*; that is, all top-level contents of a class except initializers and comments.
3. The term *comment* always refers to *implementation* comments. We do not use the phrase "documentation comments", instead using the common term "Javadoc."

Other "terminology notes" will appear occasionally throughout the document.

Overview   Downloads   **Documentation**   Community   Technologies   Training

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Code Conventions for the Java ^{TM} Programming Language
Revised April 20, 1999

1 Introduction

1.1 Why Have Code Conventions

1.2 Acknowledgments

Java SDKs and Tools

- Java SE
- Java EE and Glassfish
- Java ME
- Java Card
- NetBeans IDE
- Java Mission Control

Java Resources

- Java APIs
- Technical Articles
- Demos and Videos
- Forums
- Java Magazine
- Developer Training
- Tutorials
- Java.com

Java SE
Java EE
Java ME
Java SE Subscription
Java Embedded
Java Card
Java TV
Community
Java Magazine

Základné CMD príkazy

- **javac** – java compiler
  - ❑ javac PrvaTrieda.java
- **java** – spustenie preloženého programu
  - ❑ java PrvaTrieda
  - ❑ java -jar PrvyProgram.jar
- **jar** – práca so súbormi jar
  - ❑ jar cfe PrvyProgram.jar PrvaTrieda PrvaTrieda.class
  - ❑ jar cfm PrvyProgram.java Manifest.txt PrvaTrieda.class
- **javadoc** – vytvorenie dokumentácie zo
  zdrojových súborov

```
Manifest-Version: 1.0
Created-By: meno autora
Main-Class: PrvaTrieda
```

na konci prazdny riadok

Hierarchy For All Packages

Package Hierarchies:

java.applet, java.awt, java.awt.color, java.awt.datatransfer, java.awt.dnd, java.awt.event, java.awt.font, java.awt.geom, java.awt.im, java.awt.im.spi, java.awt.image, java.awt.image.renderable, java.awt.print, java.beans, java.beans.beancontext, java.io, java.lang, java.lang.annotation, java.lang.instrument, java.lang.invoke, java.lang.management, java.lang.ref, java.lang.reflect, java.math, java.net, java.nio, java.nio.channels, java.nio.channels.spi, java.nio.charset, java.nio.charset.spi, java.nio.file, java.nio.file.attribute, java.nio.file.spi, java.rmi, java.rmi.activation, java.rmi.dgc, java.rmi.registry, java.rmi.server, java.security, java.security.acl, java.security.cert, java.security.interfaces, java.security.spec, java.sql, java.text, java.text.spi, java.time, java.time.chrono, java.time.format, java.time.temporal, java.time.zone, java.util, java.util.concurrent, java.util.concurrent.atomic, java.util.concurrent.locks, java.util.function, java.util.jar, java.util.logging, java.util.prefs, java.util.regex, java.util.spi, java.util.stream, java.util.zip, javax.accessibility, javax.activation, javax.activity, javax.annotation, javax.annotation.processing, javax.crypto, javax.crypto.interfaces, javax.crypto.spec, javax.imageio, javax.imageio.event, javax.imageio.metadata, javax.imageio.plugins.bmp, javax.imageio.plugins.jpeg, javax.imageio.spi, javax.imageio.stream, javax.jws, javax.jws.soap, javax.lang.model, javax.lang.model.element, javax.lang.model.type, javax.lang.model.util, javax.management, javax.management.loading, javax.management.modelmbean, javax.management.monitor, javax.management.openmbean, javax.management.relation, javax.management.remote, javax.management.remote.rmi, javax.management.timer, javax.naming, javax.naming.directory, javax.naming.event, javax.naming.ldap, javax.naming.spi, javax.net, javax.net.ssl, javax.print, javax.print.attribute, javax.print.attribute.standard, javax.print.event, javax.rmi, javax.rmi.CORBA, javax.rmi.ssl, javax.script, javax.security.auth, javax.security.auth.callback, javax.security.auth.kerberos, javax.security.auth.login, javax.security.auth.spi, javax.security.auth.x500, javax.security.cert, javax.security.sasl, javax.sound.midi, javax.sound.midi.spi, javax.sound.sampled, javax.sound.sampled.spi, javax.sql, javax.sql.rowset, javax.sql.rowset.serial, javax.sql.rowset.spi, javax.swing, javax.swing.border, javax.swing.colorchooser, javax.swing.event, javax.swing.filechooser, javax.swing.plaf, javax.swing.plaf.basic, javax.swing.plaf.metal, javax.swing.plaf.multi, javax.swing.plaf.nimbus, javax.swing.plaf.synth, javax.swing.table, javax.swing.text, javax.swing.text.html, javax.swing.text.html.parser, javax.swing.text.rtf, javax.swing.tree, javax.swing.undo, javax.tools, javax.transaction, javax.transaction.xa, javax.xml, javax.xml.bind, javax.xml.bind.annotation, javax.xml.bind.annotation.adapters, javax.xml.bind.attachment, javax.xml.bind.helpers, javax.xml.bind.util, javax.xml.crypto, javax.xml.crypto.dom, javax.xml.crypto.dsig, javax.xml.crypto.dsig.dom, javax.xml.crypto.dsig.keyinfo, javax.xml.crypto.dsig.spec, javax.xml.datatype, javax.xml.namespace, javax.xml.parsers, javax.xml.soap, javax.xml.stream, javax.xml.stream.events, javax.xml.stream.util, javax.xml.transform, javax.xml.transform.dom, javax.xml.transform.sax, javax.xml.transform.stax, javax.xml.transform.stream, javax.xml.validation, javax.xml.ws, javax.xml.ws.handler, javax.xml.ws.handler.soap, javax.xml.ws.http, javax.xml.ws.soap, javax.xml.ws.spi, javax.xml.ws.spi.http, javax.xml.ws.wsaddressing, javax.xml.xpath, org.ietf.jgss, org.omg.CORBA, org.omg.CORBA_2_3, org.omg.CORBA_2_3.portable, org.omg.CORBA.DynAnyPackage, org.omg.CORBA.ORBPackage, org.omg.CORBA.portable, org.omg.CORBA.TypeCodePackage, org.omg.CosNaming, org.omg.CosNaming.NamingContextExtPackage, org.omg.CosNaming.NamingContextPackage, org.omg.Dynamic, org.omg.DynamicAny, org.omg.DynamicAny.DynAnyFactoryPackage, org.omg.DynamicAny.DynAnyPackage, org.omg.IOP, org.omg.IOP.CodecFactoryPackage, org.omg.IOP.CodecPackage, org.omg.Messaging, org.omg.PortableInterceptor, org.omg.PortableInterceptor.ORBInitInfoPackage, org.omg.PortableServer, org.omg.PortableServer.CurrentPackage, org.omg.PortableServer.POAManagerPackage, org.omg.PortableServer.POAPackage, org.omg.PortableServer.portable, org.omg.PortableServer.ServantLocatorPackage, org.omg.SendingContext, org.omg.stub.java.rmi, org.w3c.dom, org.w3c.dom.bootstrap, org.w3c.dom.events, org.w3c.dom.ls, org.w3c.dom.views, org.xml.sax, org.xml.sax.ext, org.xml.sax.helpers

Class Hierarchy

- java.lang.**Object**
  - javax.swing.**AbstractAction** (implements javax.swing.Action, java.lang.Cloneable, java.io.Serializable)
    - javax.swing.plaf.basic.**BasicDesktopPaneUI.CloseAction**
    - javax.swing.plaf.basic.**BasicDesktopPaneUI.MaximizeAction**
    - javax.swing.plaf.basic.**BasicDesktopPaneUI.MinimizeAction**
    - javax.swing.plaf.basic.**BasicDesktopPaneUI.NavigateAction**
    - javax.swing.plaf.basic.**BasicDesktopPaneUI.OpenAction**
    - javax.swing.plaf.basic.**BasicFileChooserUI.ApproveSelectionAction**
    - javax.swing.plaf.basic.**BasicFileChooserUI.CancelSelectionAction**

www.falkhausen.de

Java 8

ENHANCED BY Google

java.applet

java.awt

java.beans

java.io

java.lang

BigInteger, BigDecimal

java.math

java.net
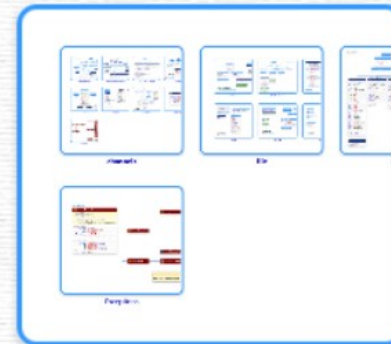
java.nio

WorldWind Java

Fork me on GitHub

Swing? To sa už predsa nepoužíva... -> NASA
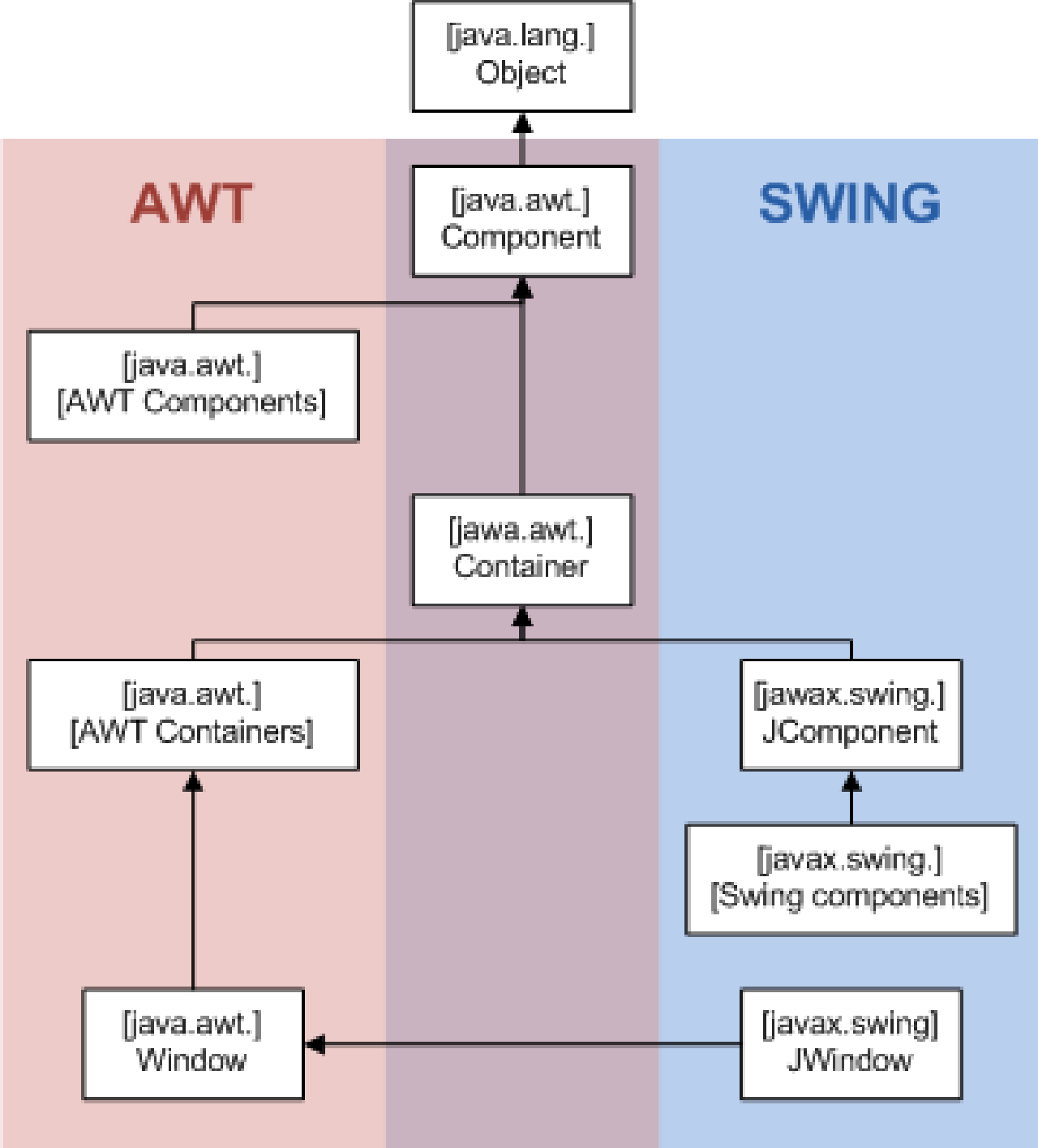
Overview

Get Started

Features

Demos

Examples

Demos

The applications here demonstrate some of WorldWind's rich capabilities.

Requirements

- Up to date video card drivers
- Java Runtime Environment (JRE) 11
- Java and OpenGL setup can be tested using JOGL demo site.

- **Triedy grafického** používateľského rozhrania sú **potomkovia** triedy **Object**

- **Základ** je trieda **Component**: tlačidlá, zaškrtávacie políčka, zoznamy

- Od nej odvodená trieda **kontajner**, ktorá kreslí ostatné prvky napr. trieda **Window** a **Panel**

- **Odlíšenie prvkov** AWT od Swing – písmeno **J**

Flow Layout

Umiestnenie komponent

- **Zľava doprava, zhora dole**. Poradie komponent je dané poradím ich vkladania do kontajneru.

- Do riadku sa vloží toľko komponentov, koľko dovoľuje šírka kontajneru.
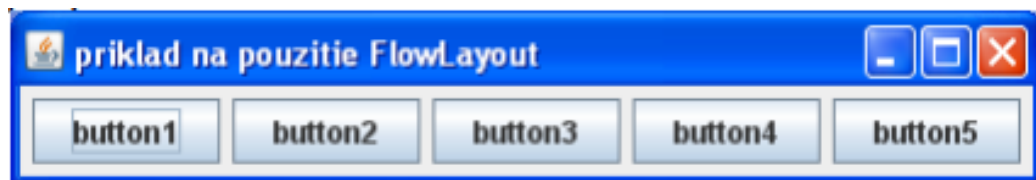
Veľkosť kontajneru

- Preferovaná šírka je súčtom:
  - Šírka ľavej a pravej výplne kontajneru
  - Súčet šírky vodorovných medzier
  - Súčet uprednostňovaných šírok všetkých komponentov.
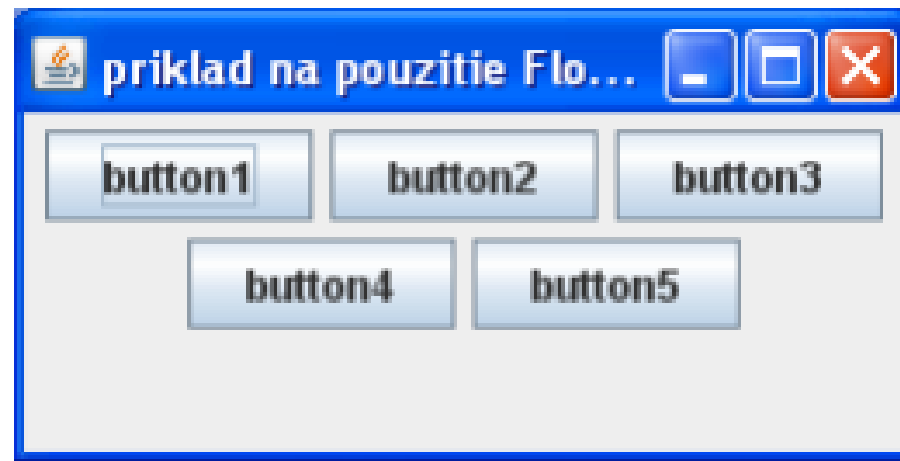
Grid Layout

Umiestnenie komponent

- Komponenty sú **zľava doprava** a **zhora dole**, v poradí v ktorom sú do kontajneru pridávané
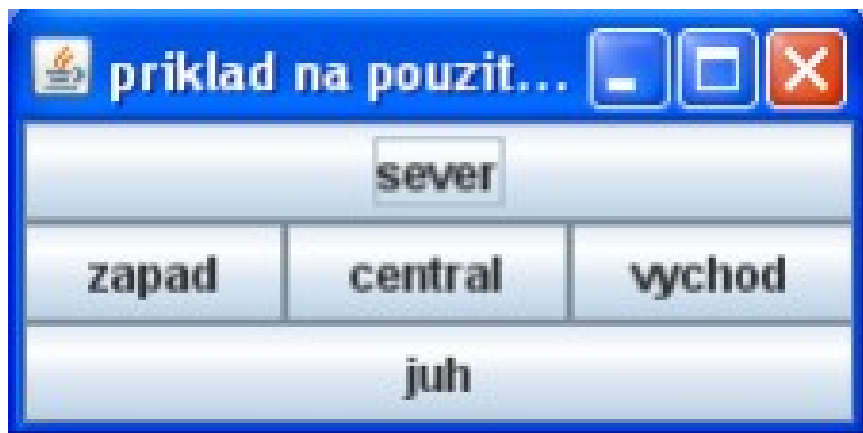

Veľkosť kontajneru

- Pri výpočte minimálnej (a preferovanej) výšky kontajneru sa nájde najväčšia výška a šírka zo všetkých minimálnych (preferovaných) výšok a šírok komponentov.

- Táto výška a šírka sa vynásobí počtom riadkov, resp. stĺpcov, pripočítajú sa medzery medzi komponentmi a okraje.

Border Layout

Umiestnenie komponent

- Podľa obmedzujúceho pravidla **NORTH** – horná časť, **SOUTH** – dolná časť, **EAST** – pravá časť, **WEST** – ľavá časť, **CENTER** – stredná časť

Veľkosť kontajneru

- Minimálna šírka je šírka okrajov plus maximum z:
  - Minimálna šírka horného komponentu
  - Súčet minimálnych šírok komponentov v pravej, ľavej a strednej časti a medzier
  - Minimálna šírka dolného komponentu
- Analogicky je vypočítaná minimálna výška, preferovaná šírka a výška.

MiG Calendar 6.0
Java Calendar Component

MigLayout - Java Layout Manager
for Swing, SWT and JavaFX

"MiG Layout makes complex layouts easy and normal layouts zero-liners."

Quick Start Guide

*View this **PDF** for a **Fast Start**!*

Aký Layout mám použiť?

- Záleží na tom, aký druh grafického rozhrania vytvárate

- Môžete použiť len jedno alebo dve jednoduché rozloženia, alebo sa budete musieť obrátiť na pokročilejšie rozloženie

- Používam WindowBuilder v Netbeans/Eclipse na chvíľu a výrazne zjednodušuje prácu s mnohými rozloženiami, najmä GridBagLayout

- Strávil som veľa času písaním rozvrhnutí ručne, ale s WindowBuilderom alebo pravdepodobne s podobne pokročilým vizuálnym editorom, môžete vytvoriť rozloženia v oveľa menej času

- **65 % GridBagLayout** - Jedno rozloženie, ktoré to čo potrebujete urobiť urobiť, bez ohľadu na to, čo riešite

- **15 % Box/BoxLayout** - Skvelé pre rýchle a ľahké **lepenie 2 komponentov dohromady**

- **12 % BorderLayout** - Dobré pre **pripojenie panelu s tlačidlami alebo informačného panela** na panel s obsahom. Takmer vždy ho používam na **pridanie obsahu do JFrame**

- **3 % FlowLayout** - užitočné **pre tlačidlá panelov,** ale nič iné

- **3 % CardLayout** - Väčšina užitočná v programoch, ktoré zobrazujú rôzne **obsahové panely** pre rôzne prevádzkové režimy.

- 2 % Iné - Je veľmi zriedkavé, že potrebujem niečo iné, ale príležitostne jedno z ďalších rozložení je šikovné

Aké IDE mám použiť?
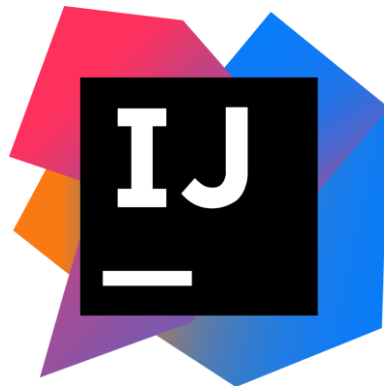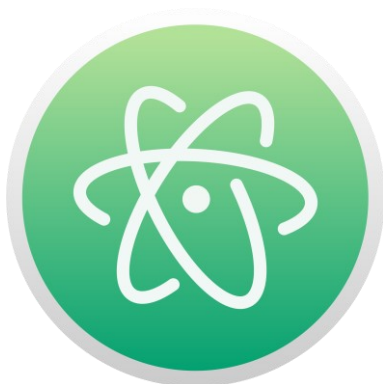
Integrated development environment

Aký editor mám použiť?

IDE ≠ editor

Updaty a aktualizácie

jdk1.6.0_21

jdk1.6.0_26

jdk1.6.0_29

jdk1.7.0_21

jre6

jre7

JavaRa

Java Developers never RIP,
they just get Garbage Collected.

Čo sa oplatí prečítať?

Slovensko a Česko	Zahraničie	YouTube tutorialy
• Albatrosmedia • Kopp • Grada • Wolters Kluwer • BEN • Veda	• O'Reilly • Manning • Packt • Apress • Wiley • No Starch Press	

O'Reilly

Čo sa oplatí/neoplatí prečítať SK/CZ

Mistrovství a Kuchárka

Čo sa oplatí/neoplatí prečítať EN

Head First

Vývojári

Verejná skupina

Informácie

Diskusia

Oznámenia

Členovia

Podujatia

Videá

Fotky

Súbory

Hľadať v tejto skupine

Skratky

Podnikanie na Slove... 2

UK Manazment Externe...

Testovacia firma

VITA - Virtual It Academy

Startupisti 2

Rubyslava 2

Vývojári

Zobraziť viac

Miroslav   **Domov**   **Vytvoriť**

Every DAY BE CODING

Ste člen ▾   ✔ Upozornenia   ➤ Zdieľať   ··· Viac

✏ Napísať príspe...   📷 Pridať fotku/vi...   📹 Živé video   ··· Viac

Napíšte niečo...

🖼 Fotka/video   🍿 Divácka párty   👥 Označiť priat...   ···

NOVÁ AKTIVITA ▾

Roland Mondek
10 h

VAŠE STRÁNKY

IT Academy

VITA - Virtual It Academy

KONTAKTY

Evka Rybárska

Jarmila Palenčárová

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Ivana Ivka Jasaňov
🎮 Hrá Word Blitz

Ivana Pavlíková

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Tags

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✦ Explore Collectives

FIND A JOB

Jobs

Companies

TEAMS ⓘ

Create free Team

A tag is a keyword or label that categorizes your question with other, similar questions. Using the right tags makes it easier for others to find and answer your question.

Show all tag synonyms

🔍 java

Popular | Name | New

java

Java is a high-level object oriented programming language. Use this tag when you're having problems using or understanding the language itself. Thi...

1827413 questions | 419 asked today, 2408 this week

javascript

For questions regarding programming in ECMAScript (JavaScript/JS) and its various dialects/implementations (excluding ActionScript). Note...

2335556 questions | 779 asked today, 4877 this week

javafx

The JavaFX platform enables developers to create and deploy Graphical User Interface (GUI) applications that behave consistently...

36355 questions | 6 asked today, 50 this week

java-8

for questions specific to Java 8 which is version 8 (internal number 1.8) of the Java platform, released on 18 March 2014. In most cases, you should also...

22076 questions | 9 asked today, 40 this week

java-stream

for questions related to the use of the Stream API. It was introduced in Java 8 and supports functional-style operations on streams of values, such...

10293 questions | 5 asked today, 26 this week

java-native-interface

The Java Native Interface (JNI) gives both the ability for JVM implementations to run system native code and the ability for native code t...

9404 questions | 12 asked this week, 38 this month

rx-java

RxJava – Reactive Extensions for the JVM – a library for composing asynchronous and event-based programs using observable sequence...

6796 questions | 6 asked this week, 27 this month

javascript-objects

for questions related to JavaScript objects.

6151 questions | 20 asked this week, 118 this month

java.util.scanner

A simple text scanner in the JDK which can parse primitive types and strings using regular expressions.

javafx-8

JavaFX 8 (previously named JavaFX 3) introduces a new API for JavaFX technology. JavaFX 8 supports 3D and brings up a Retina-Display Support. It ...

java-me

Java Platform, Micro Edition, or Java ME, is a Java platform designed for embedded systems.

facebook-javascript-sdk

Facebook's JavaScript SDK provides a rich set of client-side functionality for accessing Facebook's server-side API calls. It can collaborate with any SDK...

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IT ACADEMY