Vývoj Aplikácií s Viacvrstvovou Architektúrou

06. Lokalizácia (Logovanie)







Lektor: Kontakt: PhDr. Ing. Mgr. Miroslav Reiter, DiS., MBA, MPA

riaditel@it-academy.sk

Čo nás čaká a neminie...

1. časť

X

XML, IO

Regulárne výrazy

2. časť

Modularita

JDBC

Bezpečnosť

Prehľad JEE a .NET

Úvod do Javy

Štruktúra platformy

Vývojové technológie

Kolekcie

Logovanie

Lokalizácia

Best practices | Faily | Fuckupy

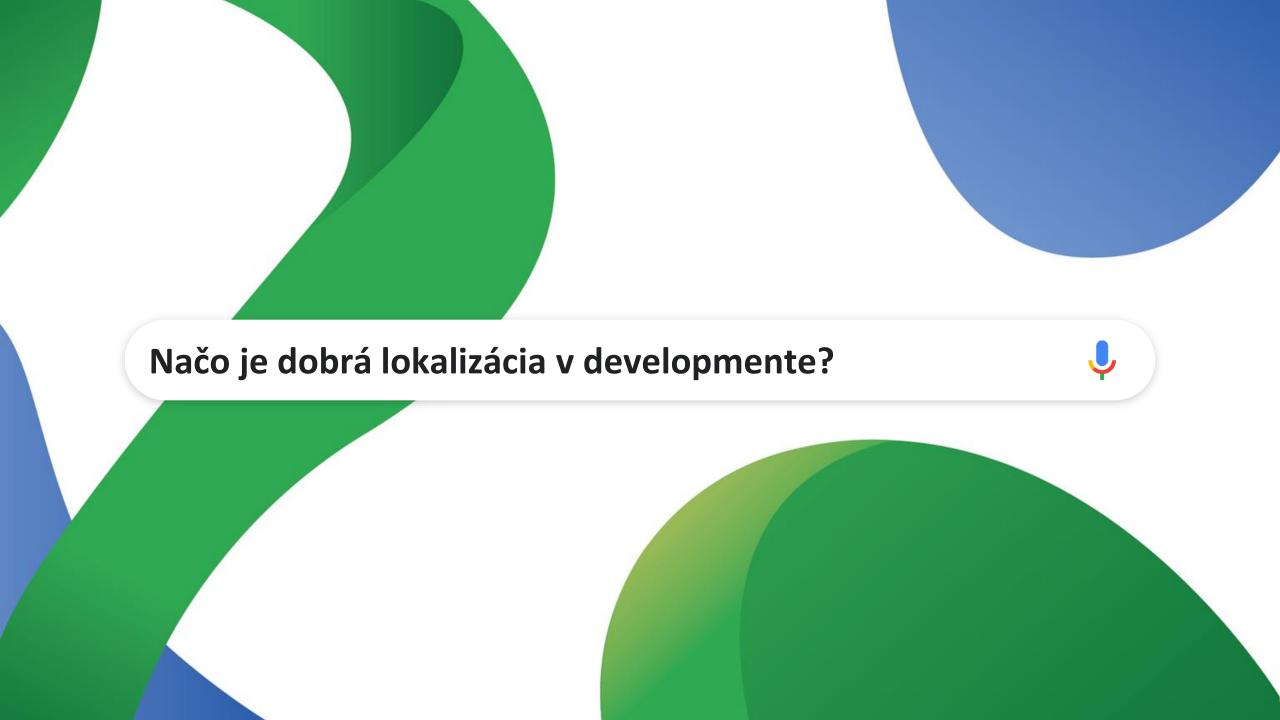
Čo nás čaká a neminie...

1. časť

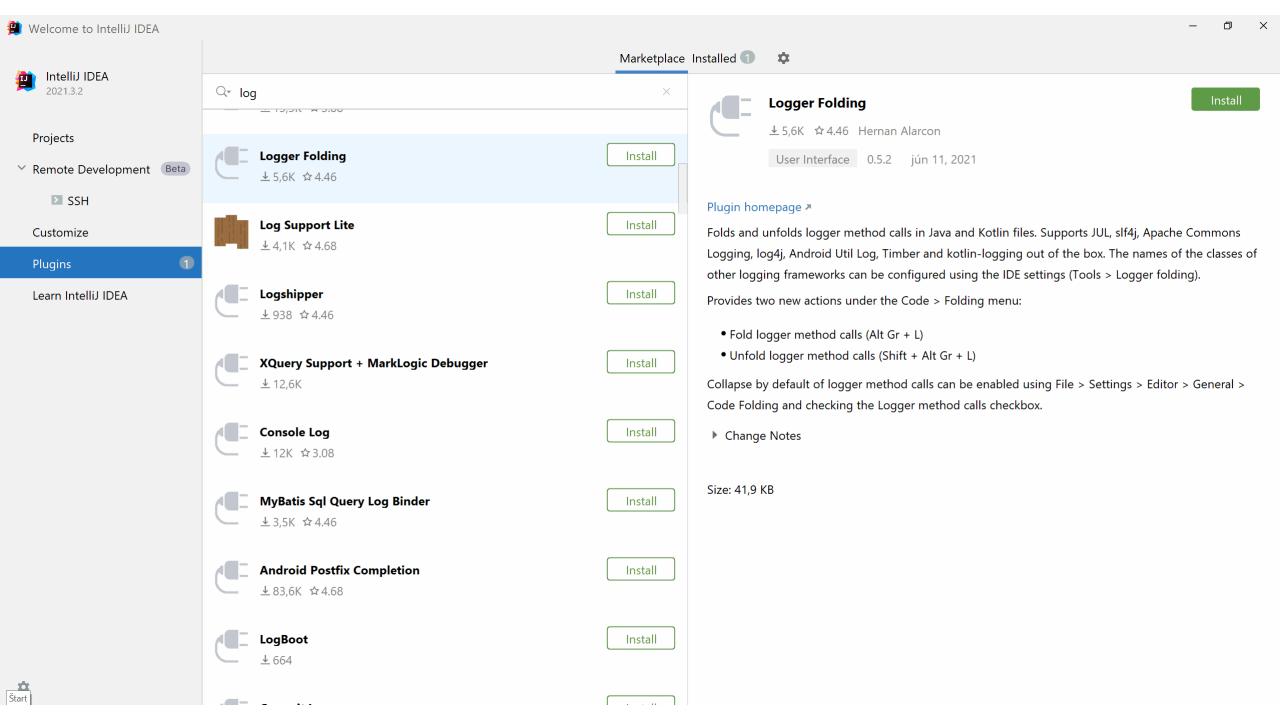
Architektúra

2. časť

Java



		Java Language				Ja	va L	_anguage					
			java	java	С	javado	3	jar	javap	jdeps	Scripting		
		Tools &	Security Monito		ring	JConso	le '	VisualVM	JMC	JFR			
		Tool APIs	JPDA	JVM	JVM TI			RMI	Java DB	Dep	loyment		
			Internat	ionalizati	ion	Web	Ser	vices	Tro	ublesho	oting		
		<u>Deployment</u>	Java Web Start Applet / Java Plug-in										
							Ja	ıvaFX					
		User Interface Toolkits	Swi	ng	Java 20			AWT	Access		bility		
JDK			Drag an	d Drop	Inp	ut Metho	ds	Image I	O Print	Service	Service Sound		_
<u>SDR</u>		<u>Integration</u> <u>Libraries</u>	IDL JDBC		BC JNDI			MI F	RMI-IIOP	MI-IIOP Scripting			
			Beans	Sec	curity	, ;	Seria	alization	Exten	sion Me			
	<u>JRE</u>	Other Base Libraries	JMX	XML	P	Net	working	Over	ride Med		Java SE		
			JNI	Date a	nd Ti	ime I	npu	t/Output	Inter	national	Compact	<u>API</u>	
			lang and util										
		lang and util	Math	Co	llecti	ons	Re	ef Objects	Reg	jular Exp			
		Base Libraries	Loggin	g Ma	Management I			rumentatio	on Cor	n Concurrency Utilities			
			Reflection	on Ve	Versioning I			erences A	PI J	AR	Z ip		
	<u>Ja</u>	va Virtual Machine			Jav	a HotSpo	ot CI	lient and S	Server VM				



Editor basics

Multiple cursors and selection ranges

LightEdit mode

- ▶ Code style and formatting
- ► Source code navigation
- ▶ Find and replace

Auto import

Code completion

- ▶ Generate code
- ▶ Code refactoring

Javadocs

Code reference information

▶ Code inspections

Intention actions

▶ File templates

▼ Live templates

Create live templates

Live template variables

Share live templates

Emmet

Compare files

Write and edit source code / Live templates

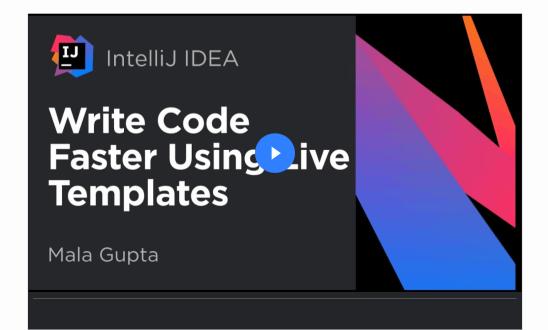
Live templates

Last modified: 19 March 2022

Expand a live template: Tab

Configure: Ctrl+Alt+S Settings/Preferences | Editor | Live Templates

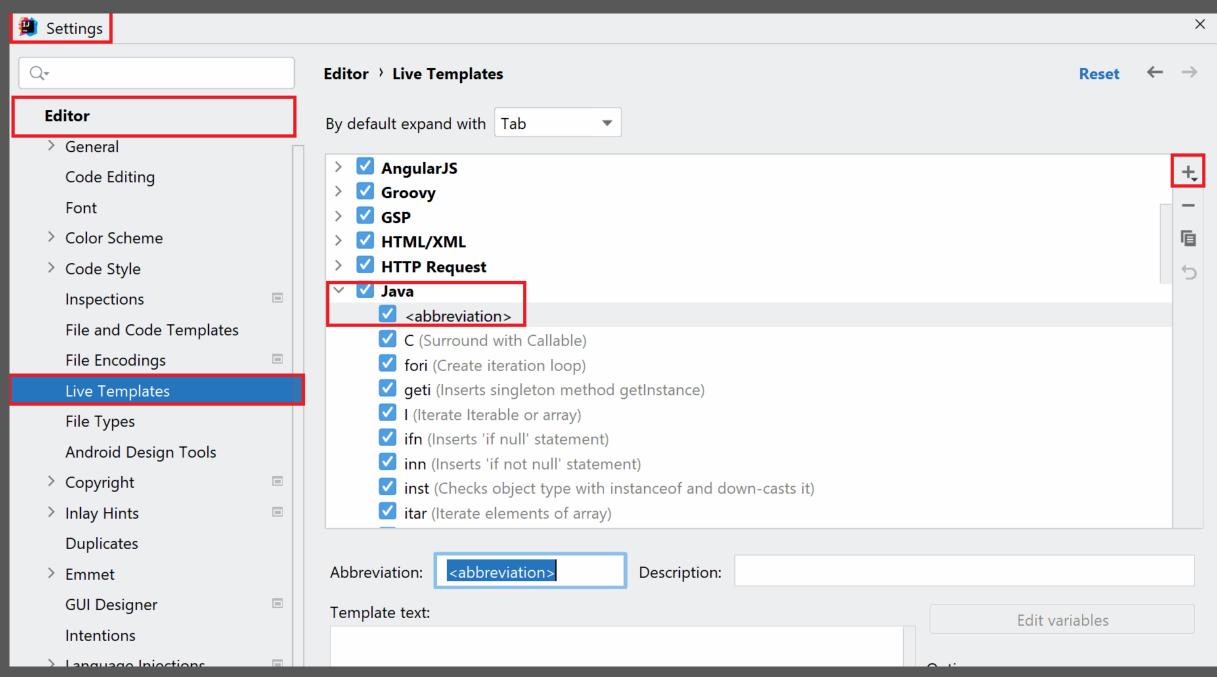
Use live templates to insert common constructs into your code, such as loops, conditions, various declarations, or print statements.

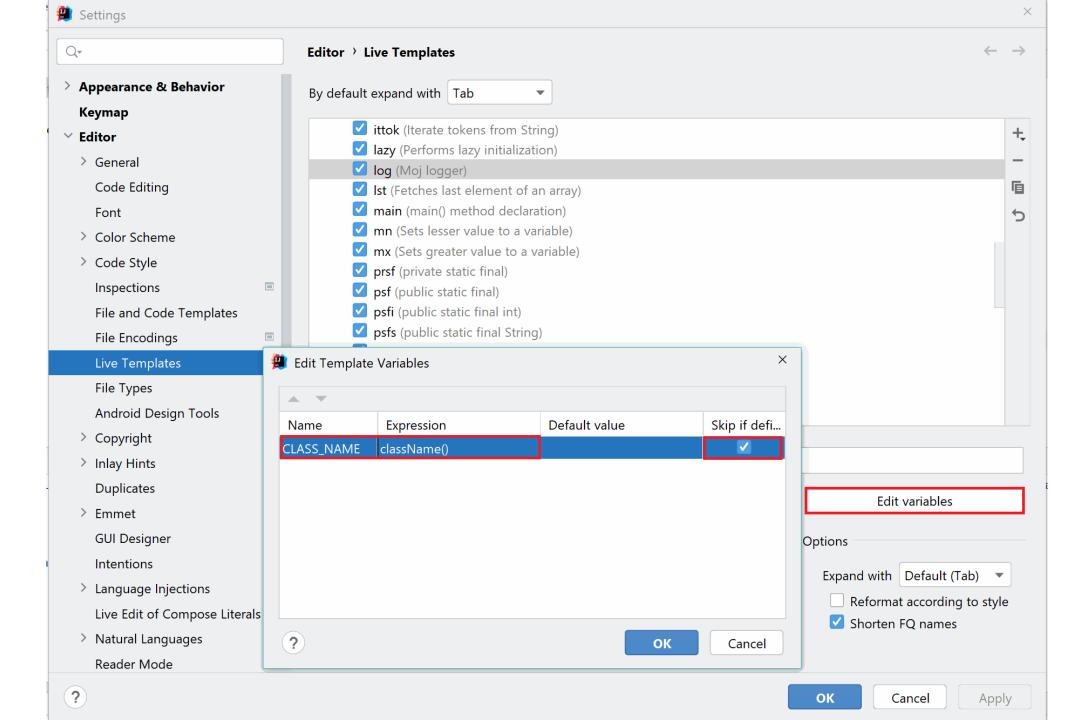


Live templates

Types of live templates

Configure live templates





Šablóny/snippety pre Loggery

logger

• private static final Logger log =
 LoggerFactory.getLogger(\${NAME}.class);

log4j

• private static final org.apache.log4j.Logger log =
 org.apache.log4j.Logger.getLogger(\$CLASS_NAME\$.class);

• slf4j

• private static final org.slf4j.Logger log =
 org.slf4j.LoggerFactory.getLogger(\$CLASSNAME\$.class);

@Log (and friends)

Captain's Log, stardate 24435.7: "What was that line again?"

The various <code>@Log</code> variants were added in lombok v0.10. *NEW in lombok 0.10:* You can annotate any class with a log annotation to let lombok generate a logger field.

The logger is named log and the field's type depends on which logger you have selected.

NEW in lombok v1.16.24: Addition of google's FluentLogger (via @Flogger).

NEW in lombok v1.18.10: Addition of <code>@CustomLog</code> which lets you add any logger by configuring how to create them with a config key.

Overview

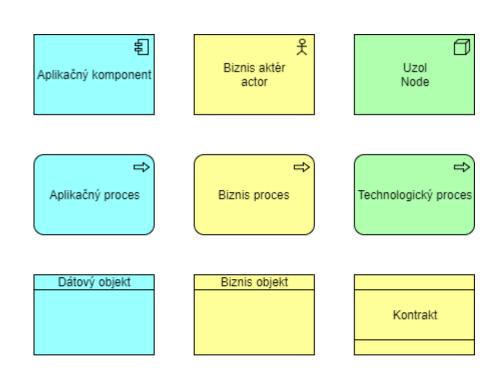
You put the variant of <code>@Log</code> on your class (whichever one applies to the logging system you use); you then have a static final <code>log</code> field, initialized as is the commonly prescribed way for the logging framework you use, which you can then use to write log statements.

There are several choices available:

```
@CommonsLog
Creates
private static final org.apache.commons.logging.Log log = org.apache.commons.logging.LogFactory.getLog(LogExample.class);
@Flogger
Creates
private static final com.google.common.flogger.FluentLogger log = com.google.common.flogger.FluentLogger.forEnclosingClass();
@JBossLog
Creates
private static final org.jboss.logging.Logger log = org.jboss.logging.Logger.getLogger(LogExample.class);
@Log
Creates
private static final java.util.logging.Logger log = java.util.logging.Logger.getLogger(LogExample.class.getName());
@Log4j
Creates private static final org.apache.log4j.Logger log = org.apache.log4j.Logger.getLogger(LogExample.class);
@Log4j2
Creates
private static final org.apache.logging.log4j.Logger log = org.apache.logging.log4j.LogManager.getLogger(LogExample.class);
@S1f4j
```

Rozlíšenie elementov podľa rohov

- 1. Ostré rohy aktívne elementy
- 2. Zaoblené rohy element chovania (behavior)
- 3. Ostrý roh s preškrtnutím pasívne elementy
- 4. Skosené rohy motivačný element



Ovládač

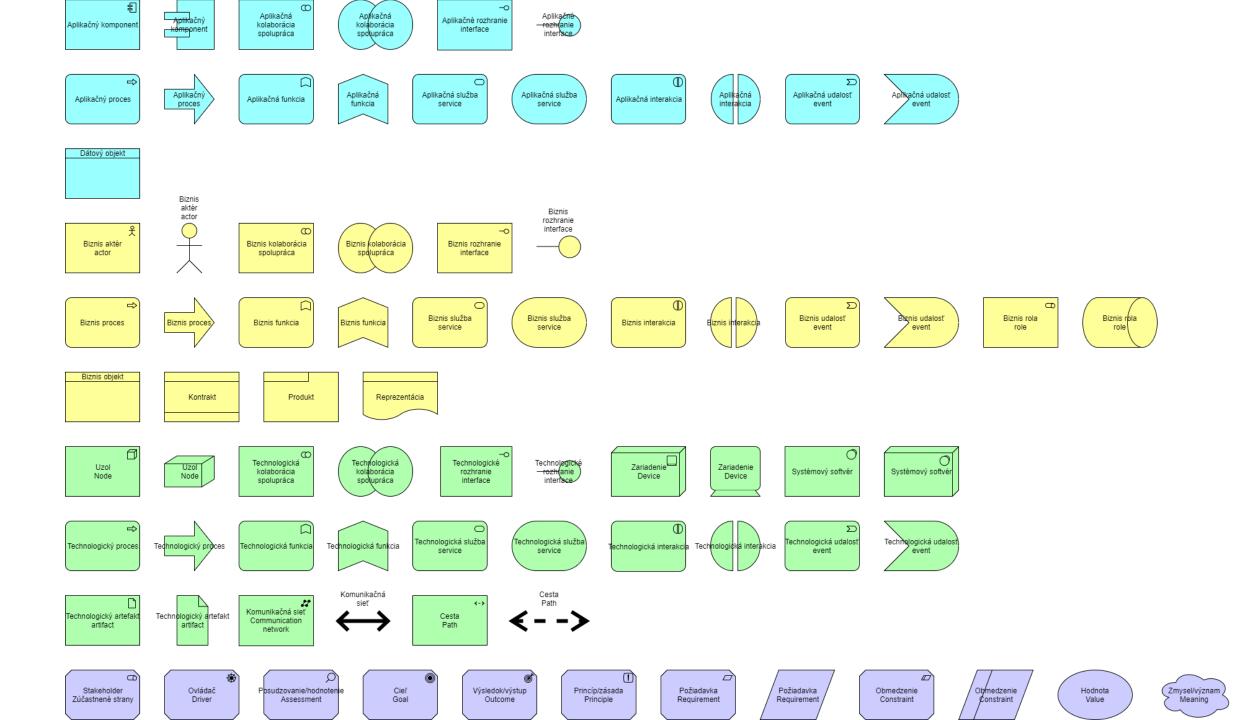
Driver

Cieľ

Goal

Stakeholder

Zúčastnené strany

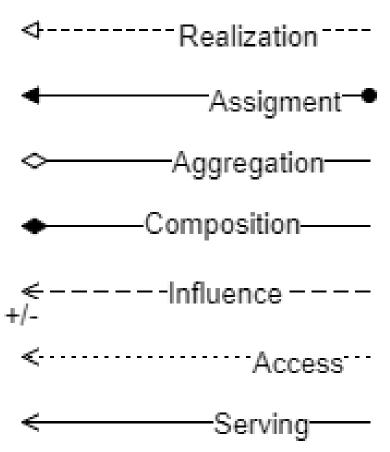


Základné prvky ArchiMate

- 1. Elementy (Elements)
- 2. Kompozičné elementy (Composite Elements)
- 3. Väzby (Relationships)
- 4. Atribúty (Attribute)
- 5. Koncept (Concept)

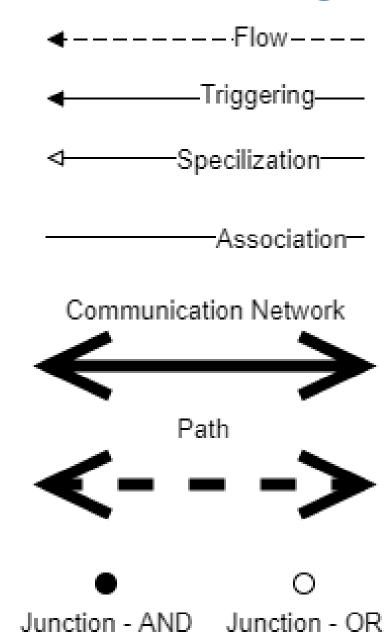


Business Actor

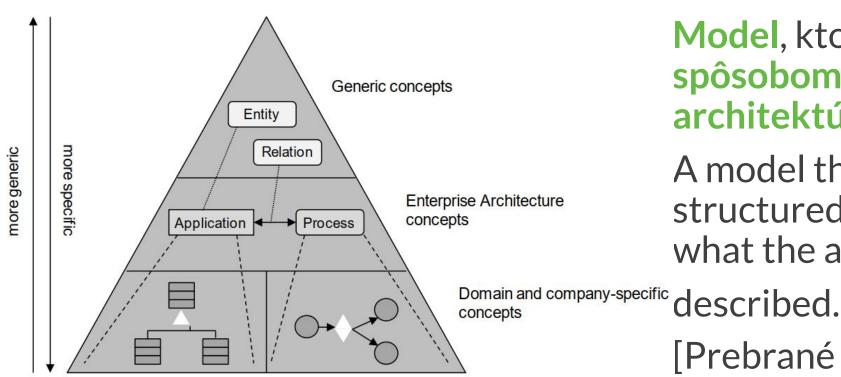


Základné prvky ArchiMate

- 6. Vrstva (Layer)
- 7. Aspekt (Aspect)
- 8. Model
- 9. Core Elementy
- 10. Viewpoint



Metamodely na rôznych úrovniach **špecifickosti**



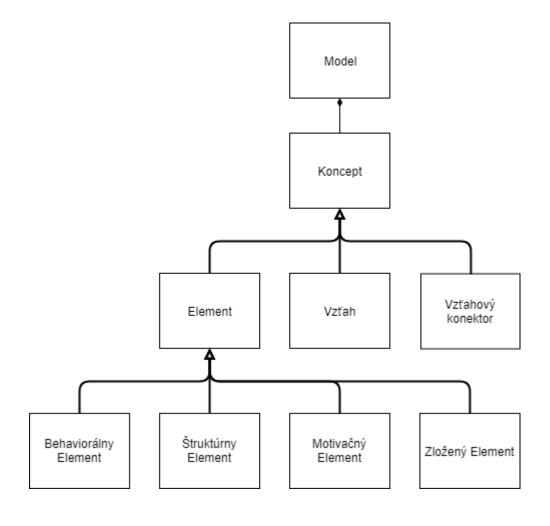
• Čo je to metamodel?

Model, ktorý štruktúrovaným spôsobom opisuje, ako a s akou architektúrou bude opísaný.

A model that describes in a structured way how and with what the architecture will be

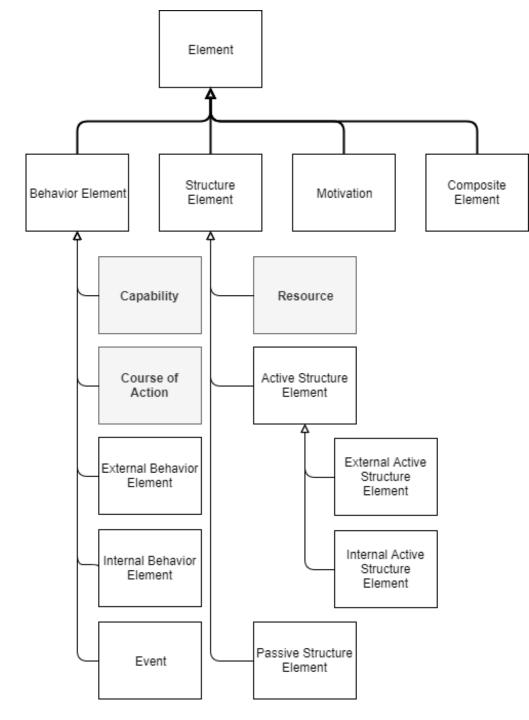
[Prebrané z: TOGAF 9.1 Časť 1, Kapitola 3 (Definície).]

Top Level jazyková štruktúra

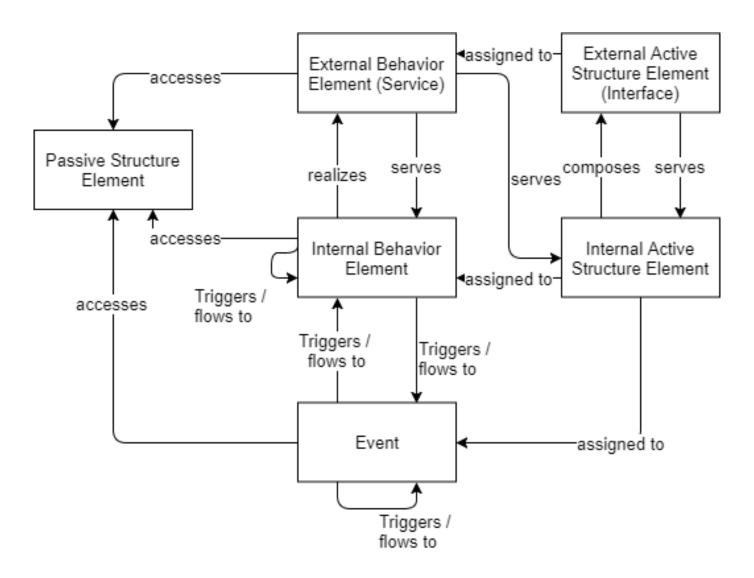


- Model je súborom konceptov. koncepcia je buď element alebo a vzťah
- Prvkom je buď správanie prvok, konštrukčný prvok, a motivačný prvok, alebo kompozitný element

ArchiMate Metamodel 1



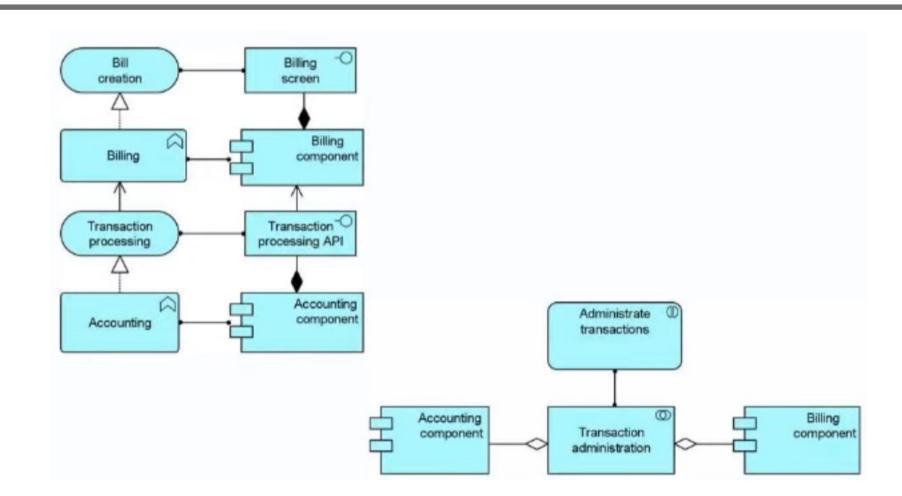
ArchiMate Metamodel 2



Typické abstrakcie v jazyku ArchiMate

- Externé (čierna skrinka) Čo musí systém urobiť v prostredí
- Interný (biela skrinka) Ako to robí
- Správanie Funkcie/Procesy
- Aktívna štruktúra Aktéri/Aplikačné komponenty/Infraštruktúra
- Koncepčná predstavuje informáciu, ktorú podnik považuje za relevantnú
- Logická manipulácia prostredníctvom informačných systémov. (komponent/funkcia aplikácie)
- Fyzická obchodné objekty/dátové objekty/artefakty

Príklad finančné/transakčné systémy



Prehľad väzieb (Relationship)

- Väzby sa delia 4 skupiny
- Väzby v jednotlivých kategóriách sú zoradené od najslabšej po najsilnejšiu

Štrukturálne (Structural)

<	Realization
•	Assigment •
~	——Aggregation—
•	—Composition——

Dynamické (Dynamické)

←	Flow
•	Triggering

Definujúce závislosti (Dependency)

← /-	Influence
<	·····Access···
←	Serving—

Iné (Others)

4	-Specilization

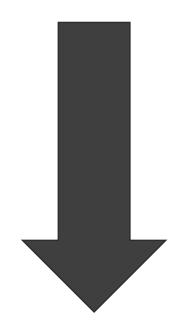
O

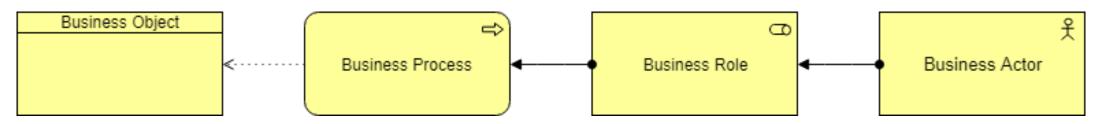
Junction - AND Junction - OR

Prehľad väzieb (Relationship)

Väzby môžu byť zoradené podľa svojej sily (od najslabšej po najsilnejšiu)

- 1. Influence najslabšia
- 2. Access
- 3. Serving
- 4. Realization
- 5. Assigment
- **6.** Aggregation
- 7. Composition najsilnejšia





Rozpoznávacie znaky väzieb

Počiatok väzby

- Jednoduchá čiara podľa typu väzby
- Vyplnený kruh resp. gulička

Telo väzby

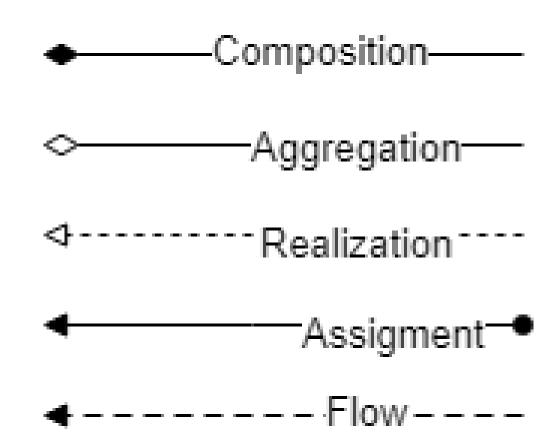
- Plná čiara
- Prerušovaná
- Drobno Prerušovaná

	_	 	
	•		
		_	
 	 	 _	

Rozpoznávacie znaky väzieb

Šípka

- 1. Diamant vyplnený
- 2. Diamant prázdny
- 3. Šípka uzavretá, plná čiara šípky, nevyplnené vnútro
- 4. Šípka uzavretá, plná čiara šípky, vyplnené vnútro
- 5. Šípka otvorená, plná čiara šípky
- 6. Šípka otvorená, prerušovaná čiara šípky



Definície väzieb 1

Vazba	Definice	Тур
Realization	The realization relationship indicates that an entity plays a critical role in the creation, achievement, sustenance, or operation of a more abstract entity.	Structural
Assigment	The assignment relationship expresses the allocation of responsibility, performance of behavior, or execution.	Structural
Aggregation	The aggregation relationship indicates that an element groups a number of other elements.	Structural
Composition	The composition relationship indicates that an element consists of one or more other elements.	Structural
← _ <u>Influence</u>	The influence relationship models that an element affects the implementation or achievement of some motivation element.	Dependency
Access>	The access relationship models the ability of behavior and active structure elements to observe or act upon passive structure elements.	Dependency
Serving	The serving relationship models that an element provides its functionality to another element.	Dependency

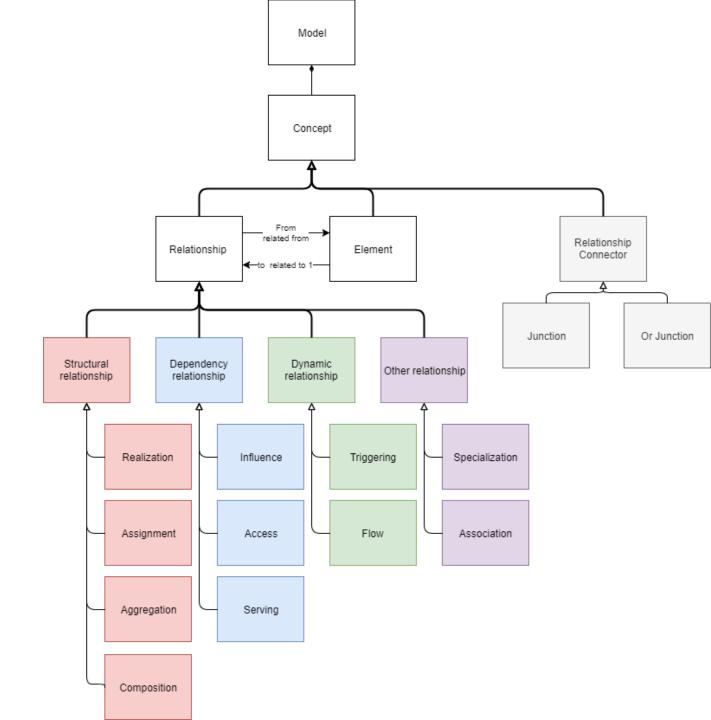
Definície väzieb 1

Vazba	Definice	Тур
Flow	The flow relationship represents transfer from one element to another.	Dynamic
Triggering	The triggering relationship describes a temporal or causal relationship between elements.	Dynamic
Specialization	The specialization relationship indicates that an element is a particular kind of another element.	Other
Association	An association models an unspecified relationship, or one that is not represented by another ArchiMate relationship.	Other
Junction - AND Junction - OR	A junction is used to connect relationships of the same type.	Other

Zoznam povolených väzieb

↓ From / → To	Assessment	Constraint	Driver	Goal	Meaning	Outcome	Principle	Requirement	Stakeholder	Value	Capability	Course of Action	Resource	Business Actor	Business Collaboration	Contract	Business Event	Business Function	Business Interaction	Business Interface	Business Object	Business Process	Product	Representation	Business Role	Business Service
Assessment	cgnos	no	no	no	no	no	no	no	0	no	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Constraint	no	cgnos	no	nor	no	nor	nor	cgnos	0	no	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Driver	no	no	cgnos	no	no	no	no	no	0	no	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Goal	no	no	no	cgnos	no	no	no	no	0	no	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Meaning	no	no	no	no	cgnos	no	no	no	0	no	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Outcome	no	no	no	nor	no	cgnos	no	no	0	no	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Principle	no	no	no	nor	no	nor	cgnos	no	0	no	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Requirement	no	cgnos	no	nor	no	nor	nor	cgnos	0	no	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stakeholder	0	0	0	0	0	0	0	0	cgnos	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Value	no	no	no	no	no	no	no	no	0	cgnos	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Capability	no	nor	no	nor	no	nor	nor	nor	0	no	cfgostv	forty	fot	0	0	0	0	0	0	0	0	0	0	0	0	0
Course of Action	no	nor	no	nor	no	nor	nor	nor	0	no	fot	cfgostv	fot	0	0	0	0	0	0	0	0	0	0	0	0	0
Resource	no	nor	no	nor	no	nor	nor	nor	0	no	fiotv	forty	cfgost	0	0	0	0	0	0	0	0	0	0	0	0	0
Business Actor	no	nor	no	nor	no	nor	nor	nor	ino	no	or	or	or	cfgostv	fotv	ao	fioty	fiorty	fiorty	cfgioty	ao	fiorty	fot	ao	fioty	fiorty
Business Collaboration	no	nor	no	nor	no	nor	nor	nor	no	no	or	or	or	fgotv	cfgostv	90	fiotv	fiorty	fiorty	cfgioty	ao	fiorty	fot	ao	fgiotv	fiorty
Contract	no	nor	no	nor	no	nor	nor	nor	0	no	or	or	or	0	0	cgos	0	0	0	0	cgos	0	0	0	0	0
Business Event	no	nor	no	nor	no	nor	nor	nor	0	no	0	0	0	fot	fot	90	cfgost	fot	fot	fot	90	fot	fot	90	fot	fot
Business Function	no	nor	no	nor	no	nor	nor	nor	no	no	or	or	0	fotv	fotv	90	fotv	cfgorstv	cfgortv	fotv	90	cfgortv	fot	ao	fotv	forty
Business Interaction	no	nor	no	nor	no	nor	nor	nor	no	no	or	or	0	fotv	fotv	ao	fotv	cfgortv	cfgorstv	fotv	90	cfgortv	fot	ao	fotv	forty
Business Interface	no	nor	no	nor	no	nor	nor	nor	no	no	or	or	or	fotv	fotv	90	fotv	fotv	fotv	cfgostv	90	fotv	fot	ao	fotv	fioty
Business Object	no	nor	no	nor	no	nor	nor	nor	0	no	or	or	or	0	0	cgos	0	0	0	0	cgos	0	0	0	0	0
Business Process	no	nor	no	nor	no	nor	nor	nor	no	no	or	or	0	fotv	fotv	90	fotv	cfgortv	cfgortv	fotv	30	cfgorstv	fot	ao	fotv	forty
Product	no	nor	no	nor	no	nor	nor	nor	no	no	or	or	or	fotv	fotv	acgor	fotv	fotv	fotv	fotv	acgor	fotv	cfgost	acgo	fotv	cfgort
Representation	no	nor	no	nor	no	nor	nor	nor	0	no	or	or	or	0	0	or	0	0	0	0	or	0	0	cgos	0	0
Business Role	no	nor	no	nor	no	nor	nor	nor	no	no	or	or	or	fotv	fotv	30	fiotv	fiorty	fiorty	cfgotv	30	fiorty	fot	ao	dgostv	fiorty
Business Service	no	nor	no	nor	no	nor	nor	nor	no	no	or	or	0	fotv	fotv	ao	fotv	fotv	fotv	fotv	ao	fotv	fot	ao	fotv	cfgost

Väzby metamodel



Čo sa oplatí prečítať?

Slovensko a Česko

- Albatrosmedia
- Kopp
- Grada
- Wolters Kluwer
- BEN
- Veda

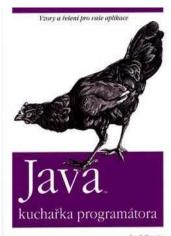
Zahraničie

- O'Reilly
- Manning
- Packt
- Apress
- Wiley
- No Starch Press

YouTube tutorialy

Oracle a O'Reilly

Čo sa oplatí/neoplatí prečítať SK/CZ









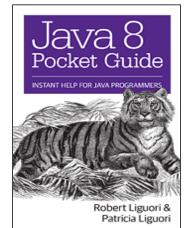


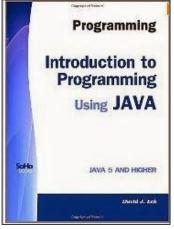


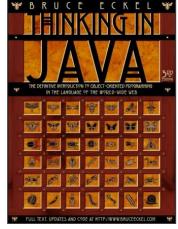


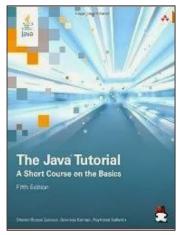


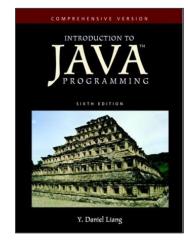
Čo sa oplatí/neoplatí prečítať EN

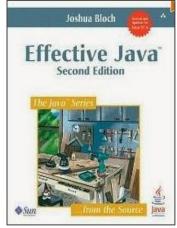


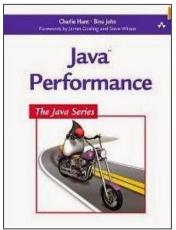


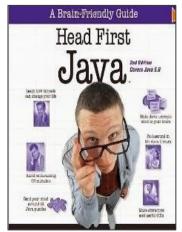




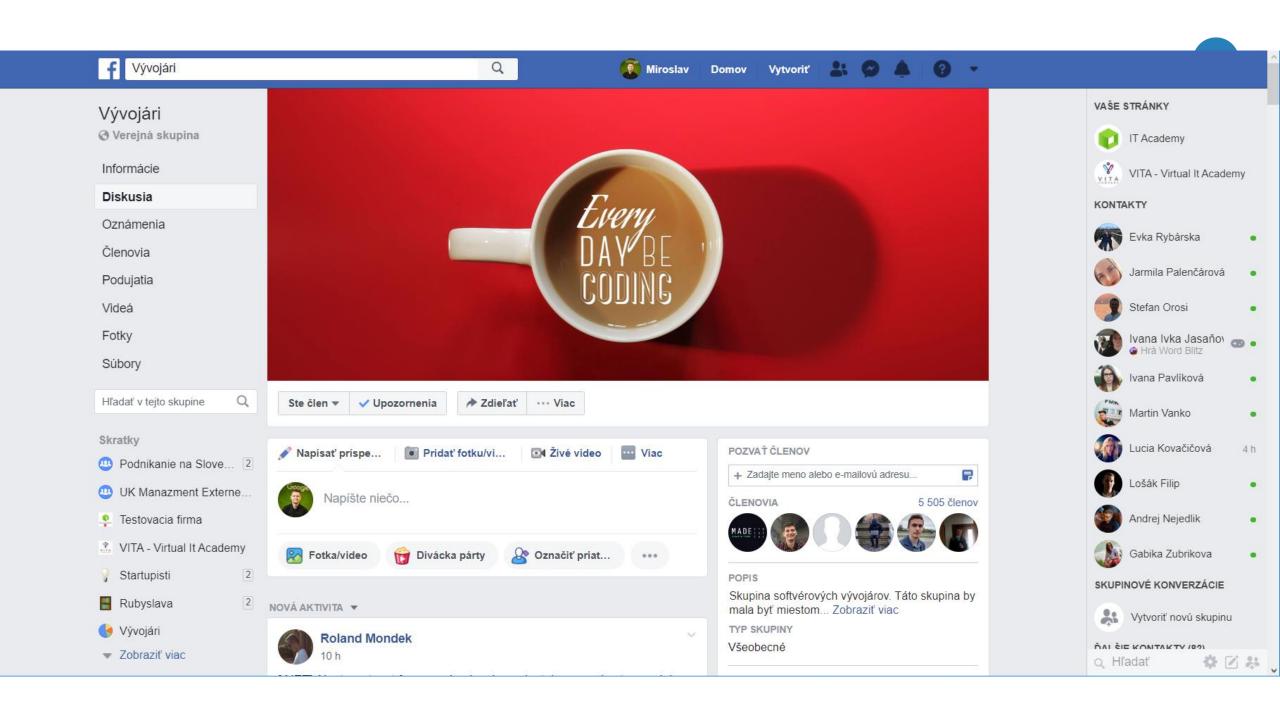


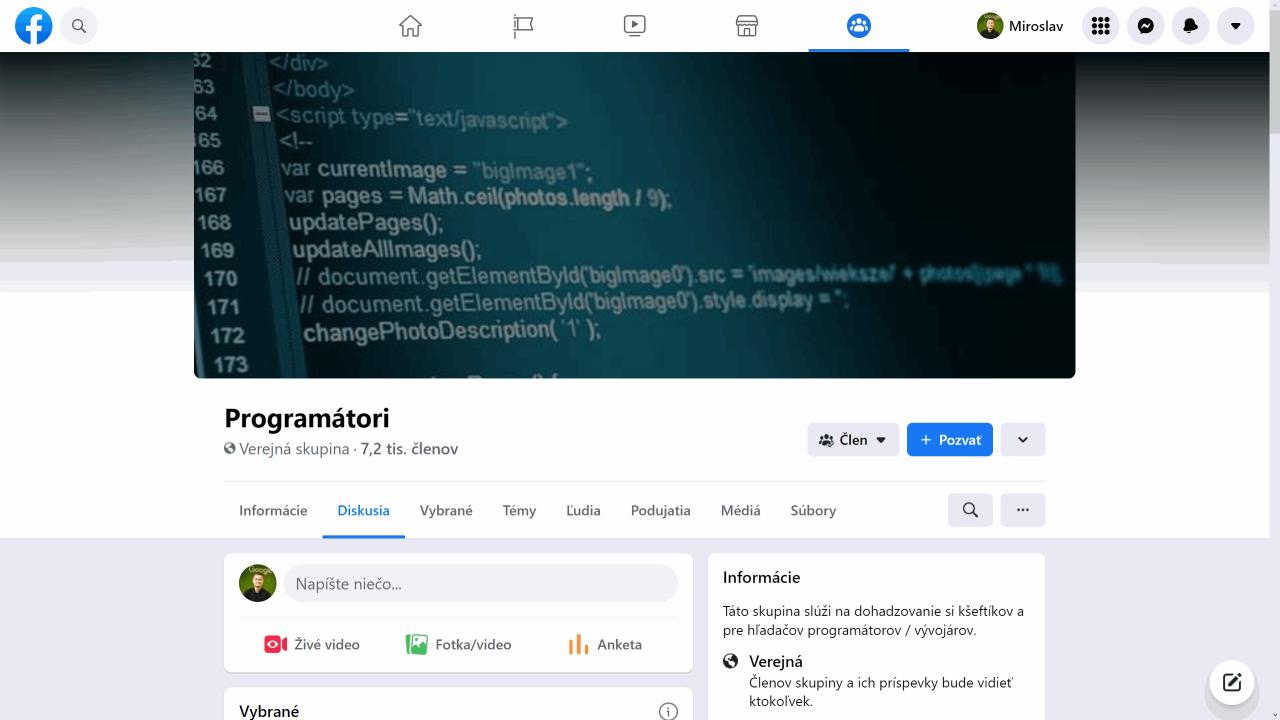


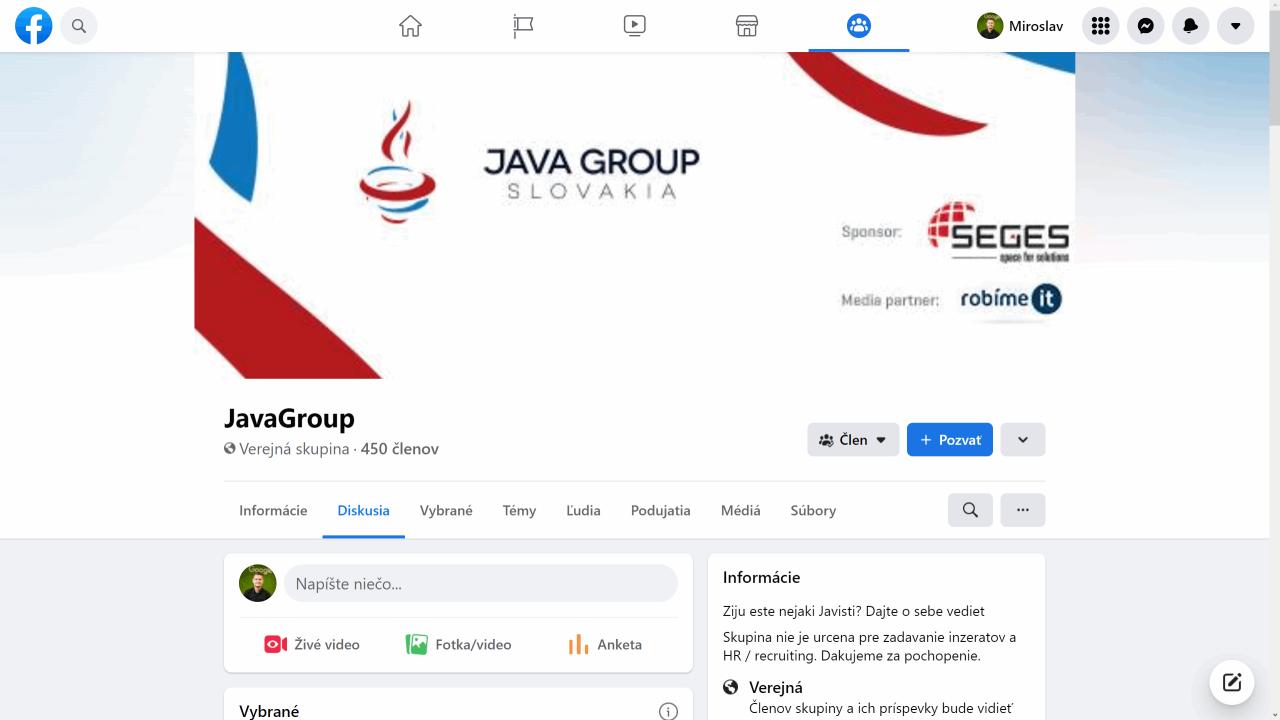




Head First









Products











Name



New





PUBLIC



Tags

Users

COLLECTIVES



FIND A JOB

Jobs

Companies

TEAMS



0

Create free Team

Tags

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

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 419 asked today, 2408 this questions week

javascript

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

2335556 779 asked today, 4877 this questions week

javafx

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

36355 6 asked today, 50 this questions 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...

Popular

22076 9 asked today, 40 this questions 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 5 asked today, 26 this questions 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 12 asked this week, 38 this questions month

rx-java

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

6796 6 asked this week, 27 this questions month

javascript-objects

for questions related to JavaScript objects.

6151 20 asked this week, 118 this questions 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...

Priestor pre vaše otázky.

Mrkni na náš YouTube kanál a daj odber

→ WWW.YOUTUBE.COM/C/IT-ACADEMYSK ←



