THE EPIC GROOVY PUZZLERS

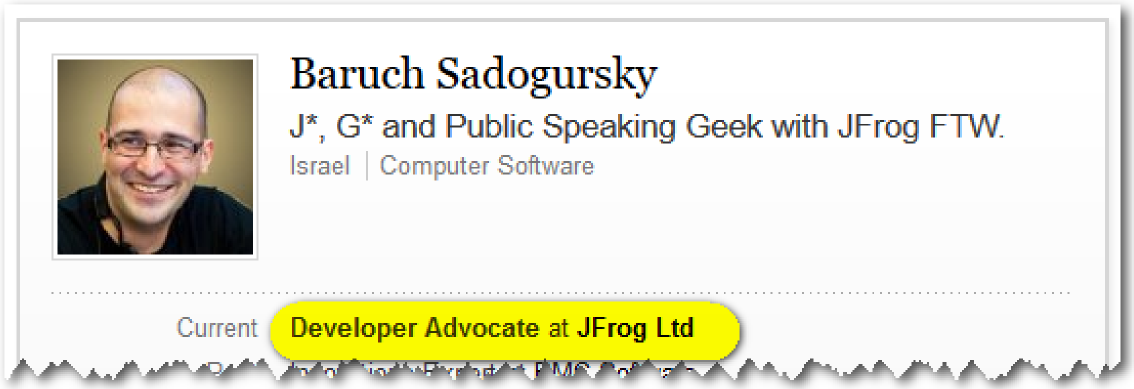
SEASON II:
THE REVENGE OF THE PARENTHESES

Who's speaking?

github.com/jbaruch

@jbaruch

linkd.in/jbaruch



Baruch Sadogursky

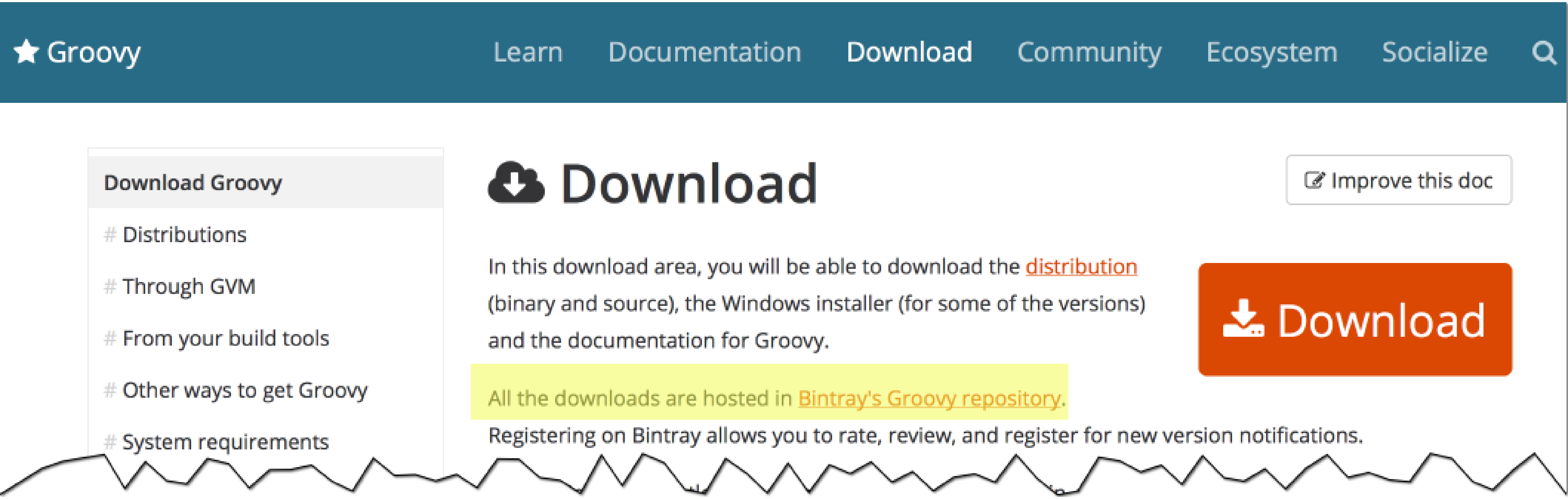
J*, G* and Public Speaking Geek with JFrog FTW.

Israel | Computer Software

Current Developer Advocate at JFrog Ltd

stackoverflow.com/users/402053/jbaruch

Frogs ❤ Groovy



Download Groovy

Distributions

Through GVM

From your build tools

Other ways to get Groovy

System requirements

Download

In this download area, you will be able to download the distribution (binary and source), the Windows installer (for some of the versions) and the documentation for Groovy.

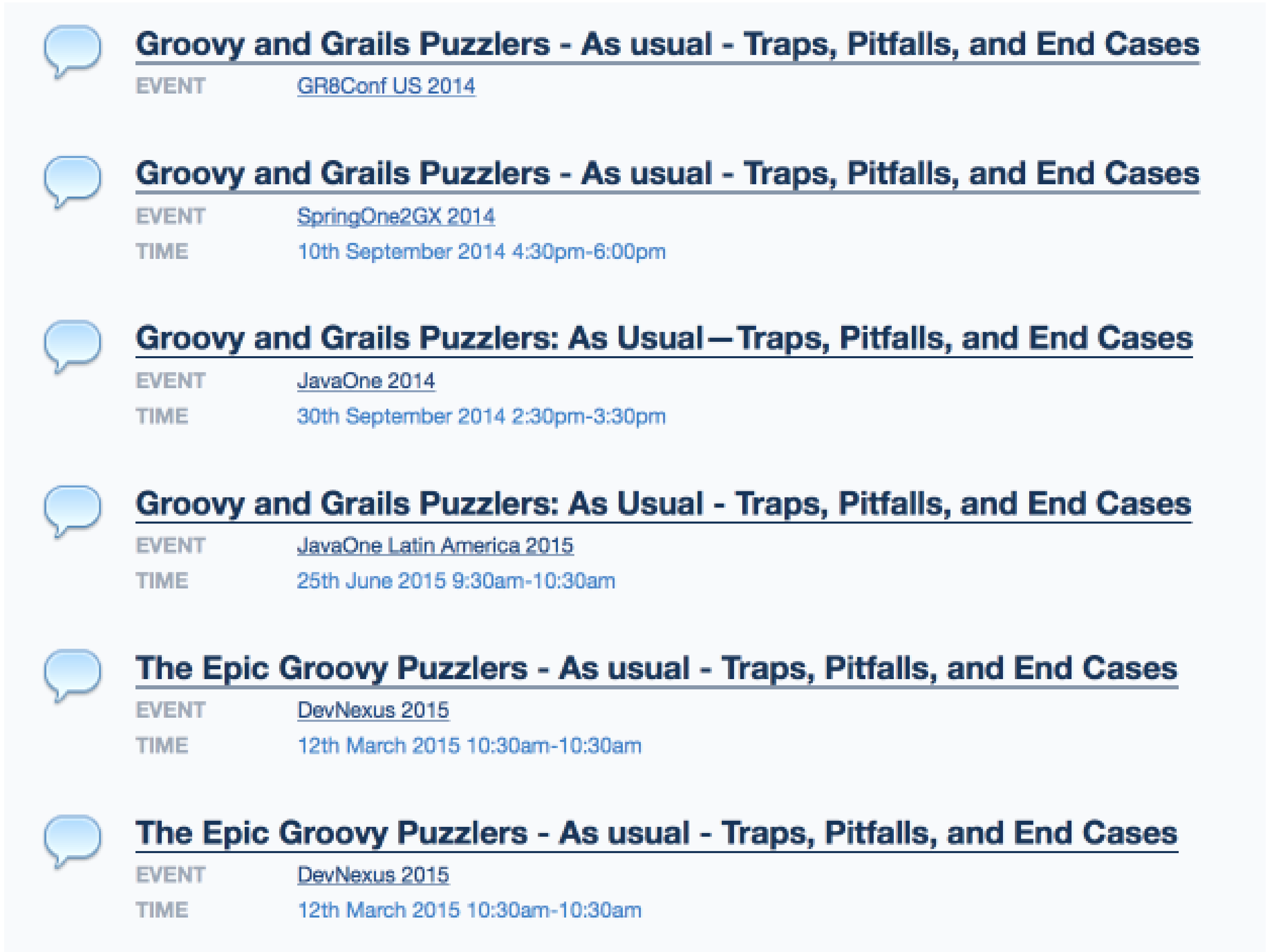
All the downloads are hosted in Bintray's Groovy repository.

Registering on Bintray allows you to rate, review, and register for new version notifications.

Frogs ❤ Groovy

- Hosting Groovy on Bintray
- Hosting Groovy on Artifactory
- Bintray UI is Grails
- Artifactory plugins are Groovy
- Gradle and Grails plugins on Bintray

First Season Was a Blast!



Groovy and Grails Puzzlers - As usual - Traps, Pitfalls, and End Cases

EVENT	GR8Conf US 2014

Groovy and Grails Puzzlers - As usual - Traps, Pitfalls, and End Cases

EVENT	SpringOne2GX 2014
TIME	10th September 2014 4:30pm-6:00pm

Groovy and Grails Puzzlers: As Usual—Traps, Pitfalls, and End Cases

EVENT	JavaOne 2014
TIME	30th September 2014 2:30pm-3:30pm

Groovy and Grails Puzzlers: As Usual - Traps, Pitfalls, and End Cases

EVENT	JavaOne Latin America 2015
TIME	25th June 2015 9:30am-10:30am

The Epic Groovy Puzzlers - As usual - Traps, Pitfalls, and End Cases

EVENT	DevNexus 2015
TIME	12th March 2015 10:30am-10:30am

The Epic Groovy Puzzlers - As usual - Traps, Pitfalls, and End Cases

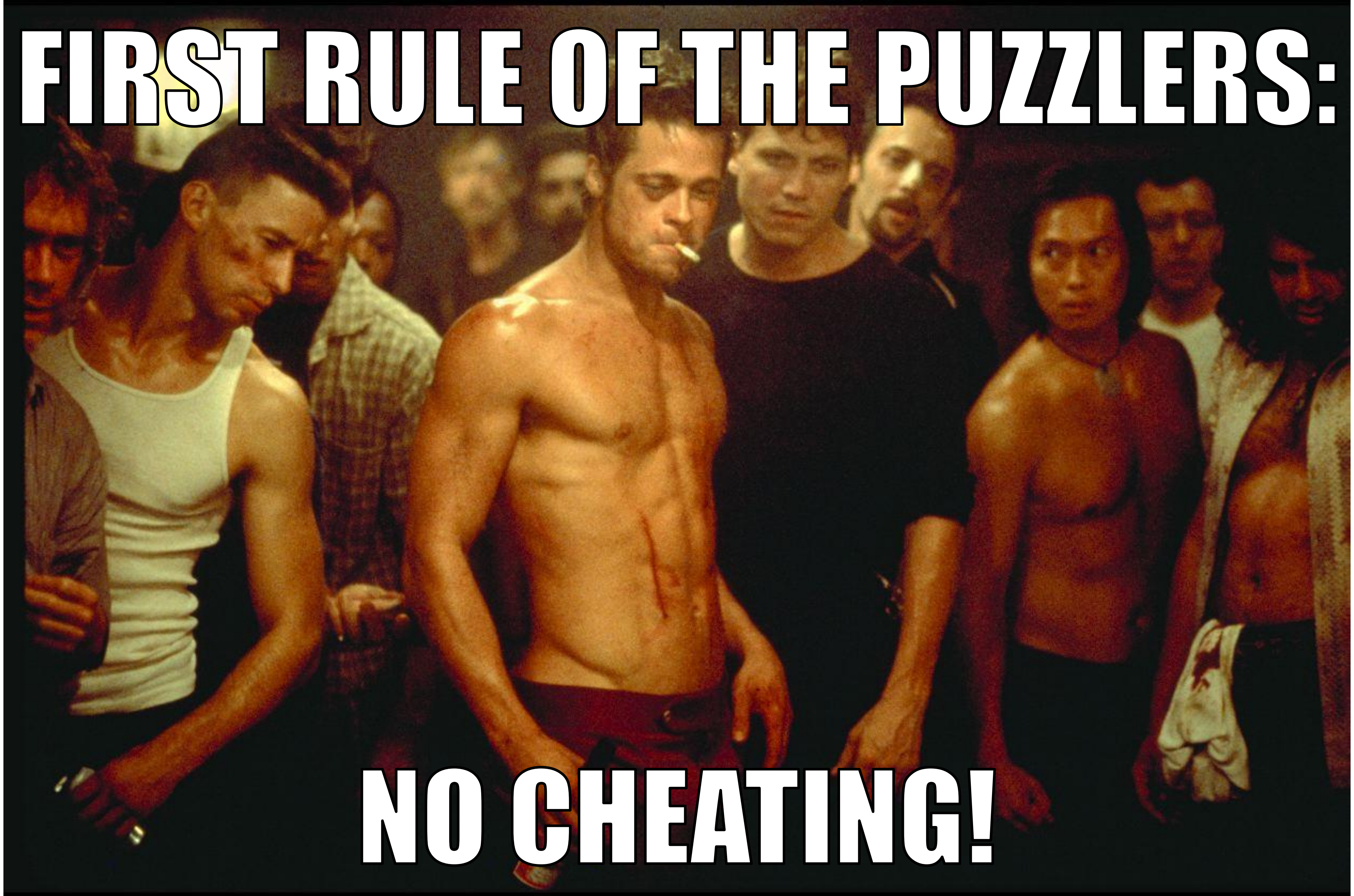
EVENT	DevNexus 2015
TIME	12th March 2015 10:30am-10:30am

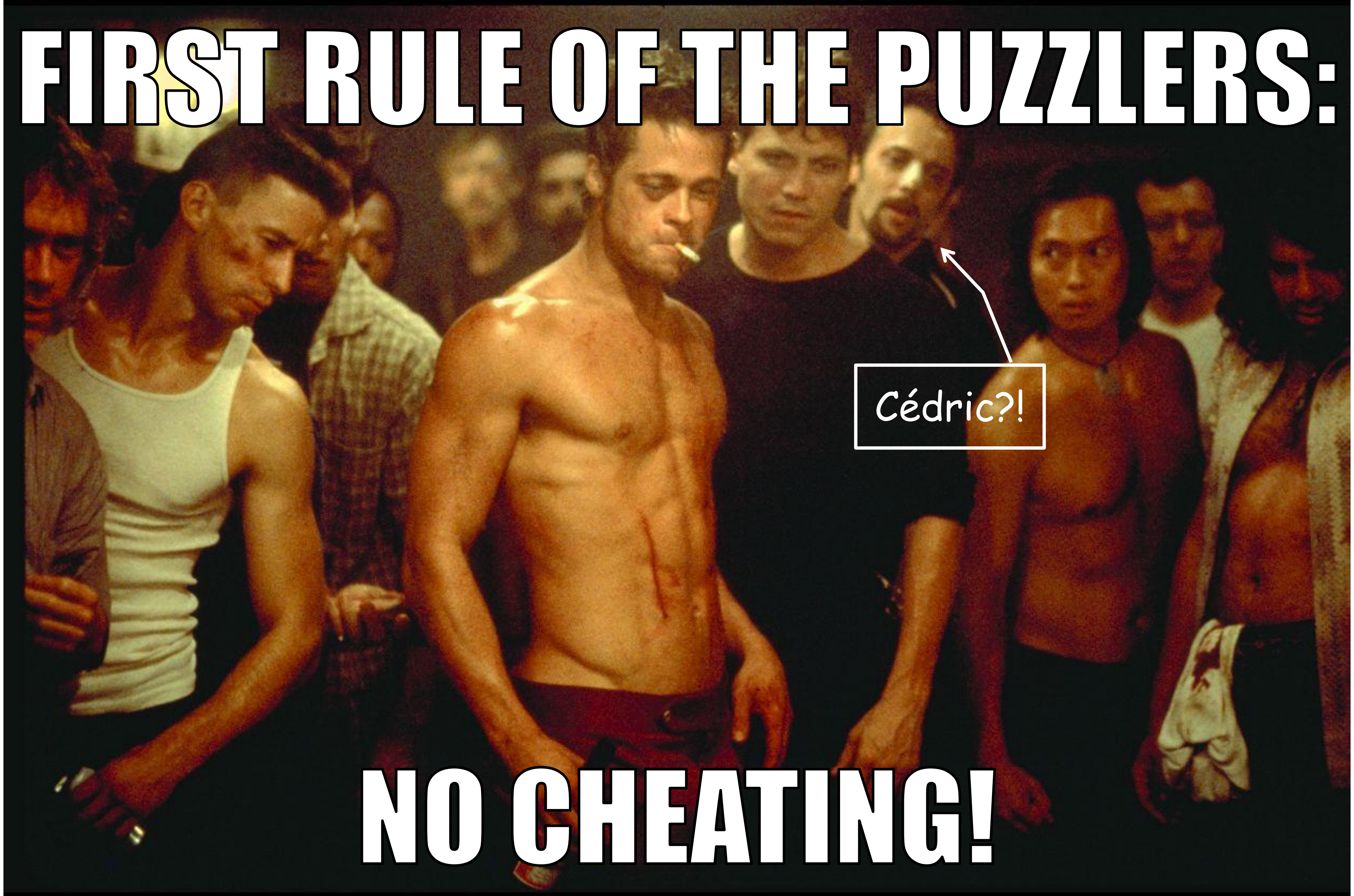
CLICK AND HACK
Java
THE TYPING BROTHERS

BTW,

1. Two entertaining guys on stage

1. Two entertaining guys on stage
2. Funny Puzzling questions
3. You think and vote
4. Awesome Groovy t-shirts fly in the air
5. Official twitter handle!
   groovypuzzlers


FIRST RULE OF THE PUZZLERS:
NO CHEATING!


FIRST RULE OF THE PUZZLERS:
Cédric?!
NO CHEATING!

All works (or doesn't work) in Groovy 2.4.5

CHALLENGE
ACCEPTED
quickmeme.com

A B C D E F G
H I J K L M
N O P Q R S
T U V W X Y Z
© 2005 www.babybirdproductions.com

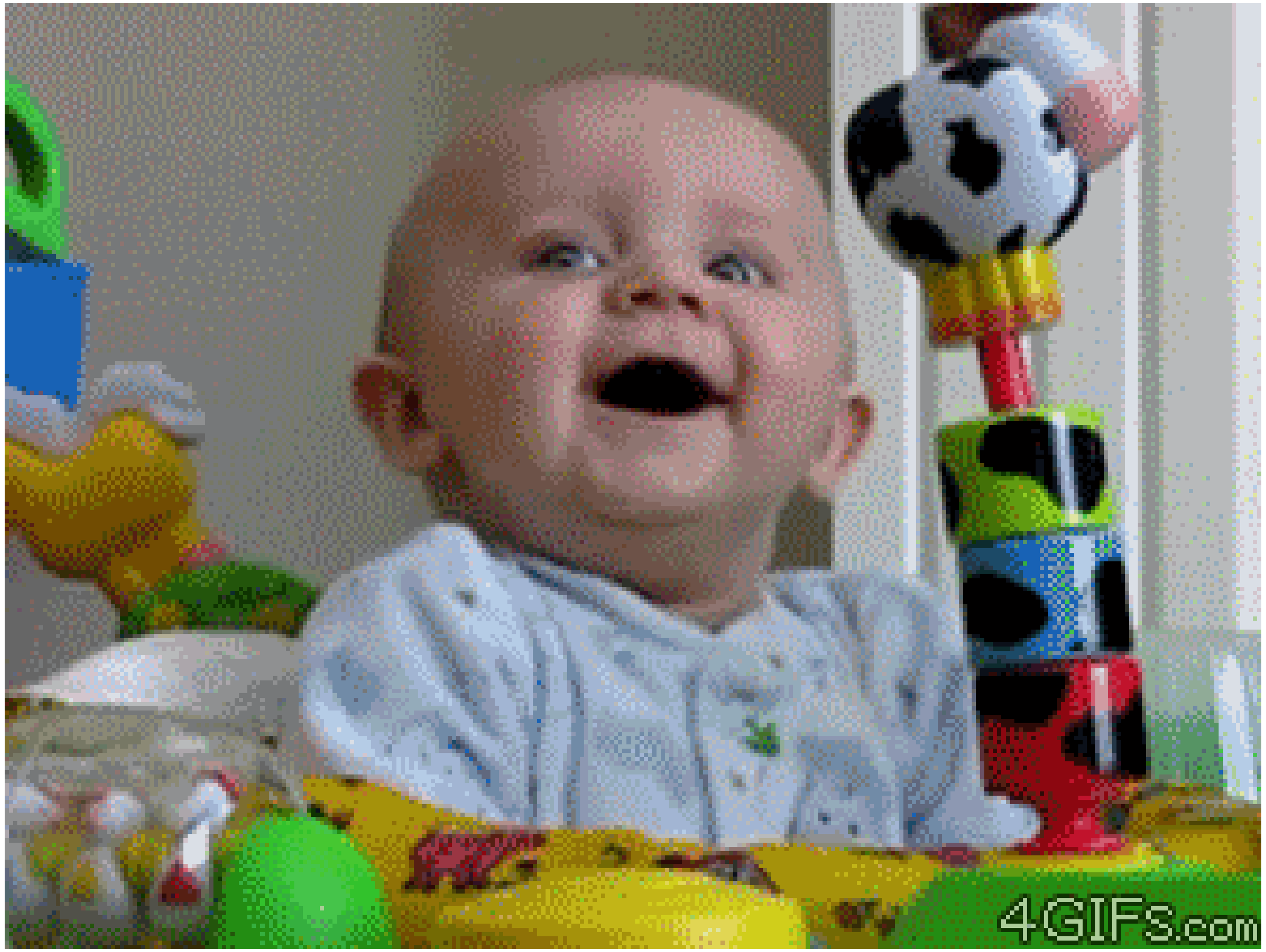
```
'a'..'z'.each { println it }
```

A. a
b
c
.
.
.
z

B. NoSuchMethodError

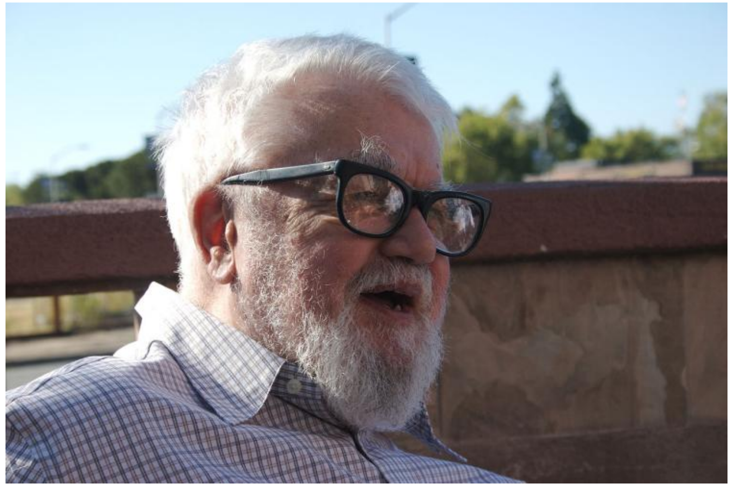
C

D. Won’t run


4GIFs.com

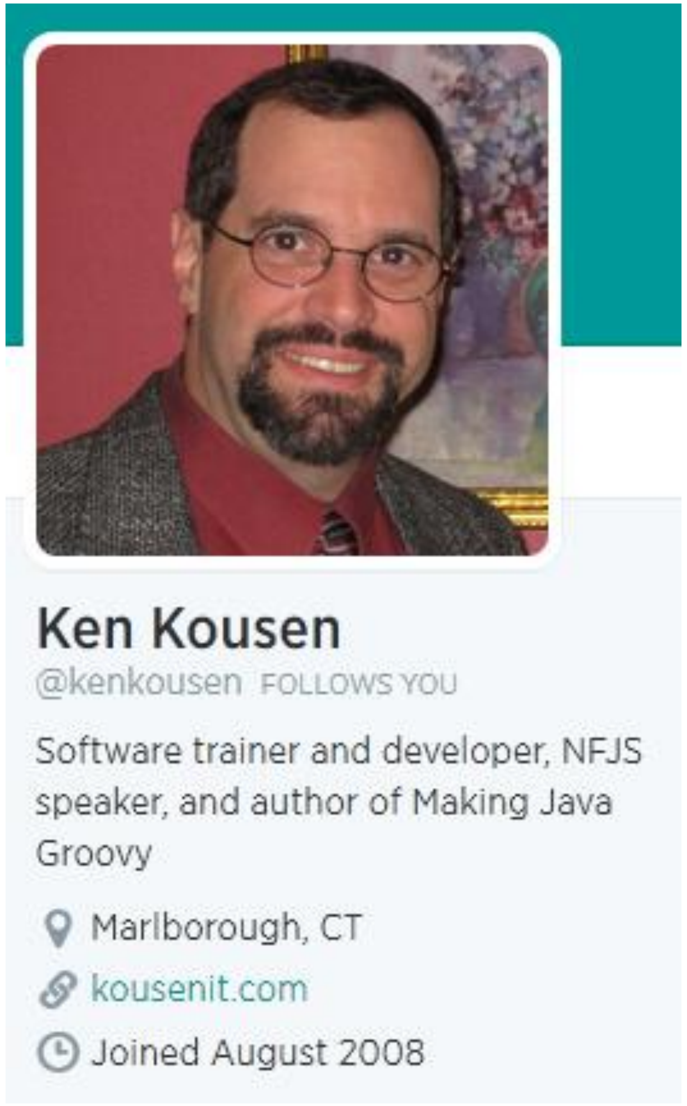
```
('a'..'z').each { println it }
```

“All problems in computer science can be solved by another pair of parentheses”



John McCarthy, the inventor of LISP

And the t-shirt goes to…



Ken Kousen

@kenkousen FOLLOWS YOU

Software trainer and developer, NFJS speaker, and author of Making Java Groovy

Marlborough, CT

kousenit.com

Joined August 2008

I'LL BE BACH

How Many Bachs?

```
def back = 'back'
def quotes = ["I'll be $back",
"I'll be ${-> back}",
"I'll be ${back}",
"I'll be "+back]
println quotes
back = 'Bach'
println quotes
```

A.No Bachs

B[illegible]e Bach

C.Two Bachs

D.Three Bachs

Only closures are evaluated at runtime

Others are inlined

Only closures are evaluated at runtime
Others are inlined

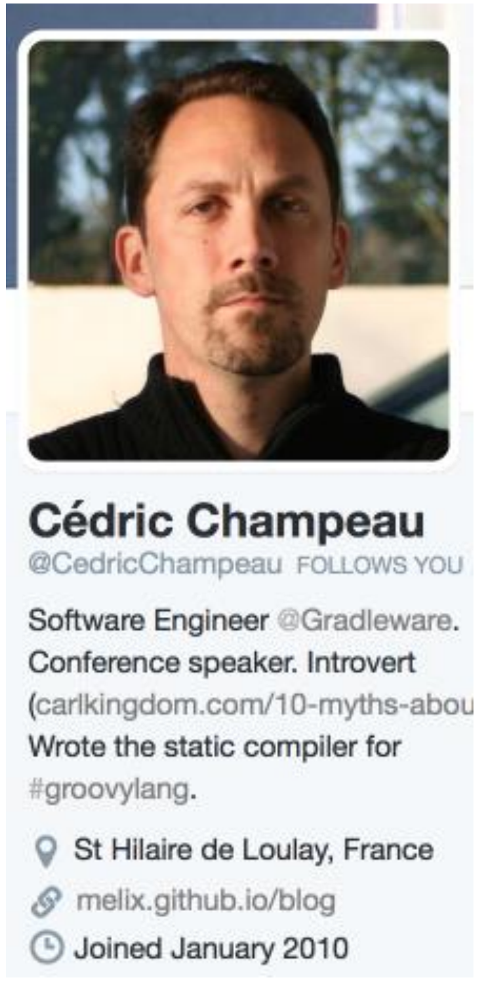
```
def back = 'back'
def quotes = ["I'll be $back",
"I'll be ${-> back}",
"I'll be ${back}",
"I'll be "+back]
```

Only closures are evaluated at runtime
Others are inlined

```
def back = 'back'
def quotes = ["I'll be $back",
"I'll be ${-> back}",
"I'll be ${back}",
"I'll be "+back]
```

That is the only closure

And the t-shirt goes to…

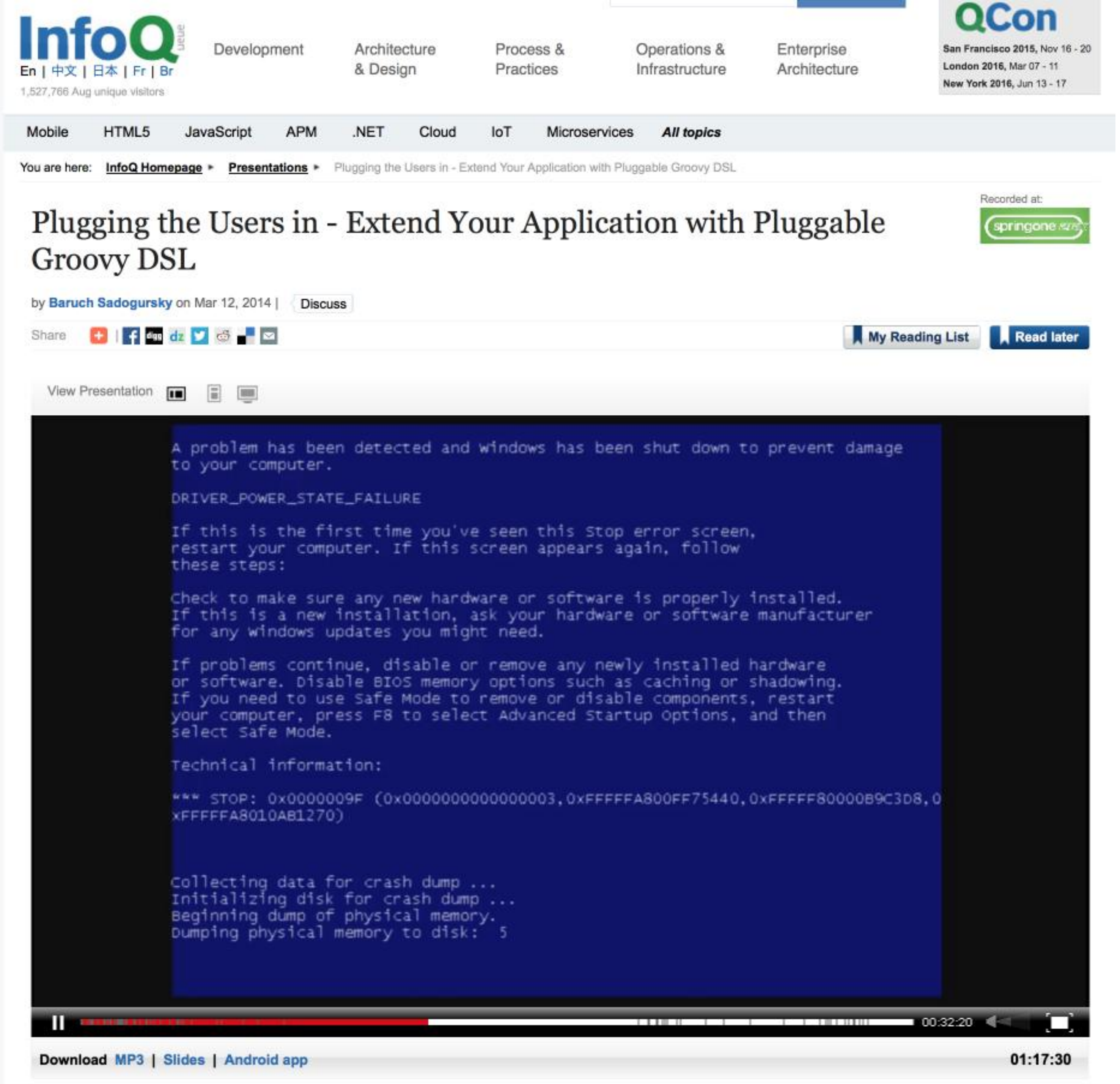


Cédric Champeau
@CedricChampeau FOLLOWS YOU

Software Engineer @Gradleware. Conference speaker. Introvert (carlkingdom.com/10-myths-abou
Wrote the static compiler for #groovylang.

St Hilaire de Loulay, France
melix.github.io/blog
Joined January 2010

IRON MAIDEN
THE NUMBER OF THE BEAST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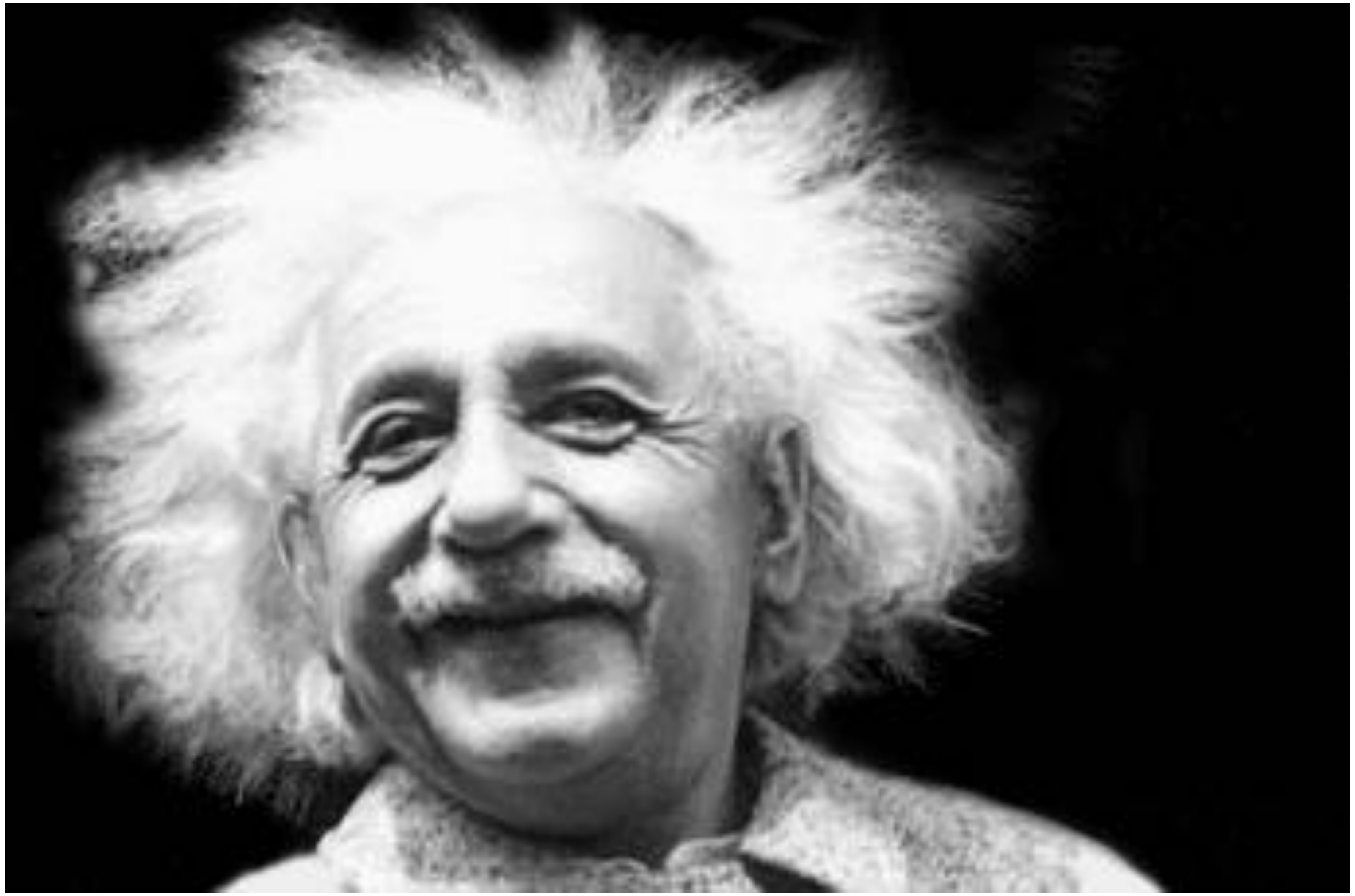
Plugging the Users in - Extend Your Application with Pluggable Groovy DSL

by Baruch Sadogursky on Mar 12, 2014 | Discuss

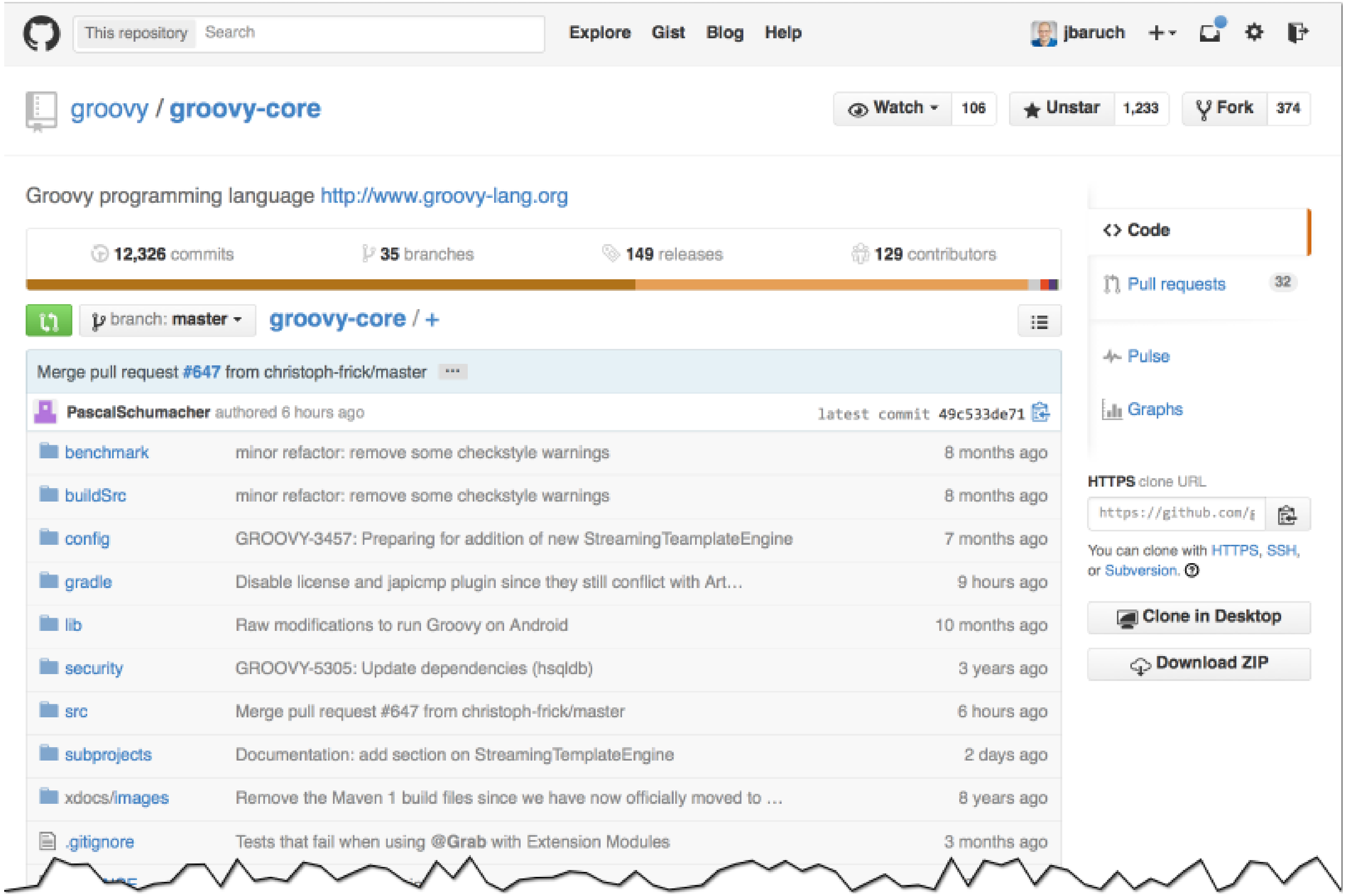
```
A problem has been detected and windows has been shut down to prevent damage
to your computer.

DRIVER_POWER_STATE_FAILURE

If this is the first time you've seen this Stop error screen,
restart your computer. If this screen appears again, follow
these steps:

Check to make sure any new hardware or software is properly installed.
If this is a new installation, ask your hardware or software manufacturer
for any windows updates you might need.

If problems continue, disable or remove any newly installed hardware
or software. Disable BIOS memory options such as caching or shadowing.
If you need to use Safe Mode to remove or disable components, restart
your computer, press F8 to select Advanced Startup Options, and then
select Safe Mode.

Technical information:

*** STOP: 0x0000009F (0x0000000000000003,0xFFFFFA800FF75440,0xFFFFF80000B9C3D8,0
xFFFFFA8010AB1270)



Collecting data for crash dump ...
Initializing disk for crash dump ...
Beginning dump of physical memory.
Dumping physical memory to disk:  5
```

How one prints 666?

A. **def** beast = **'6'** * Math.*PI*
B. **def** beast = **'6'** * **'3'**
C. **def** beast = **'667'** – 1
D. **def** beast = **'6'** + **'6'** + 0 + 6



```
def beast = '6' * Math.PI
def beast = '6' * 3.1415926…
```



Groovy programming language http://www.groovy-lang.org

12,326 commits · 35 branches · 149 releases · 129 contributors

branch: master · groovy-core / +

Merge pull request #647 from christoph-frick/master

PascalSchumacher authored 6 hours ago — latest commit 49c533de71

benchmark	minor refactor: remove some checkstyle warnings	8 months ago
buildSrc	minor refactor: remove some checkstyle warnings	8 months ago
config	GROOVY-3457: Preparing for addition of new StreamingTeamplateEngine	7 months ago
gradle	Disable license and japicmp plugin since they still conflict with Art…	9 hours ago
lib	Raw modifications to run Groovy on Android	10 months ago
security	GROOVY-5305: Update dependencies (hsqldb)	3 years ago
src	Merge pull request #647 from christoph-frick/master	6 hours ago
subprojects	Documentation: add section on StreamingTemplateEngine	2 days ago
xdocs/images	Remove the Maven 1 build files since we have now officially moved to …	8 years ago
.gitignore	Tests that fail when using @Grab with Extension Modules	3 months ago

HTTPS clone URL

https://github.com/g

You can clone with HTTPS, SSH, or Subversion.

```
/**
 * Repeat a String a certain number of times.
 *
 * @param self   a String to be repeated
 * @param factor the number of times the String should be repeated
 * @return a String composed of a repetition
 * @throws IllegalArgumentException if the number of repetitions is &lt; 0
 * @since 1.0
 */
public static String multiply(String self, Number factor) {
    int size = factor.intValue();
    …
}
```

```
def beast = '6' * 3.1415926…
def beast = '6' * 3
```

Pop Quiz!

B. **def** beast = **'6'** * **'3'**
C. **def** beast = **'667'** – 1
D. **def** beast = **'6'** + **'6'** + 0 + 6

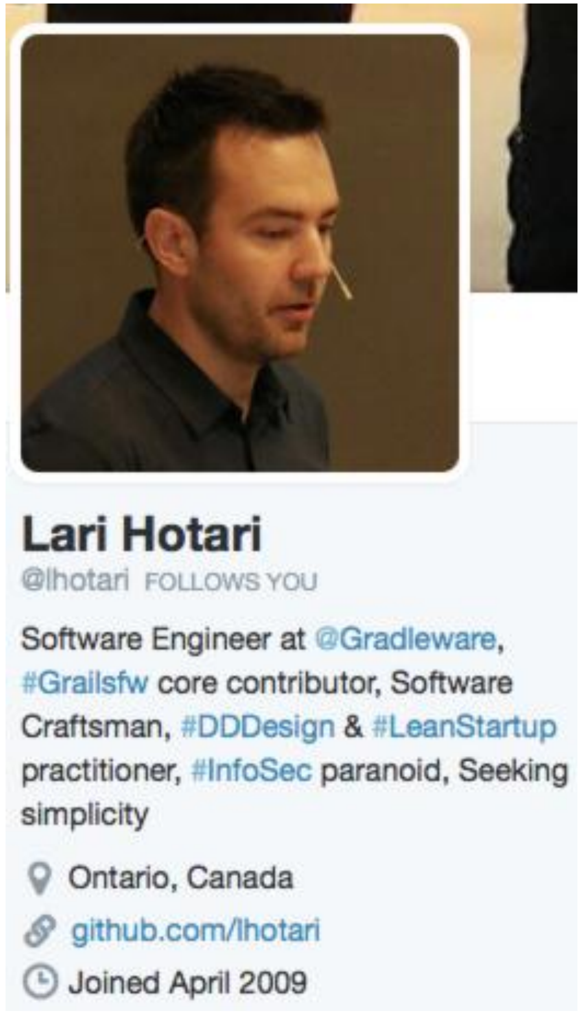
Pop Quiz!

B. **def** beast = **'6'** * **'3'**
C. **def** beast = **'667'** – 1
D. **def** beast = **'6'** + **'6'** + (0 + 6)

Pop Quiz!

B. **def** beast = **'6'** * **'3'**
C. **def** beast = **'667'** – 1
D. **def** beast = **'6'** + **'6'** + (0 + 6)

And the t-shirt goes to…



Lari Hotari
@lhotari FOLLOWS YOU

Software Engineer at @Gradleware, #Grailsfw core contributor, Software Craftsman, #DDDesign & #LeanStartup practitioner, #InfoSec paranoid, Seeking simplicity

Ontario, Canada
github.com/lhotari
Joined April 2009

```
class THERE_CAN_BE_ONLY_ONE { }

class MacLeod {

    THERE_CAN_BE_ONLY_ONE getTHERE_CAN_BE_ONLY_ONE() {
        Class clazz = THERE_CAN_BE_ONLY_ONE
        return clazz.newInstance()
    }

}

println new MacLeod().THERE_CAN_BE_ONLY_ONE
```

```
class THERE_CAN_BE_ONLY_ONE { }

class MacLeod {

    THERE_CAN_BE_ONLY_ONE
getTHERE_CAN_BE_ONLY_ONE() {
        Class clazz = THERE_CAN_BE_ONLY_ONE
        return clazz.newInstance()
    }

}

println new MacLeod().THERE_CAN_BE_ONLY_ONE
```

A. **Won't start**
B. **No such property: THERE_CAN_BE_ONLY_ONE for class: MacLeod**
C. **THERE_CAN_BE_ONLY_ONE@3d74bf60**
D. **Anot[illegible]eption**

A.MultipleCompilationErrorsException

B.Stac[illegible]rflowError

C.NullPointerException

D.Yet Another Exception

```
class MacLeod {

    THERE_CAN_BE_ONLY_ONE getTHERE_CAN_BE_ONLY_ONE() {
        Class clazz = THERE_CAN_BE_ONLY_ONE
        return clazz.newInstance()
    }

}
```

```
class MacLeod {

    THERE_CAN_BE_ONLY_ONE getTHERE_CAN_BE_ONLY_ONE() {
        Class clazz = getTHERE_CAN_BE_ONLY_ONE()
        return clazz.newInstance()
    }

}
```

Let's Fix It!

```
Class<THERE_CAN_BE_ONLY_ONE> clazz = THERE_CAN_BE_ONLY_ONE.class
```

```
class MacLeod {

    THERE_CAN_BE_ONLY_ONE getTHERE_CAN_BE_ONLY_ONE() {
              Class<THERE_CAN_BE_ONLY_ONE> clazz = THERE_CAN_BE_ONLY_ONE.class
        return clazz.newInstance()
    }

}
```

```
class MacLeod {

    THERE_CAN_BE_ONLY_ONE getTHERE_CAN_BE_ONLY_ONE() {
                Class<THERE_CAN_BE_ONLY_ONE> clazz = getTHERE_CAN_BE_ONLY_ONE().class
        return clazz.newInstance()
    }

}
```

Let's Fix It!

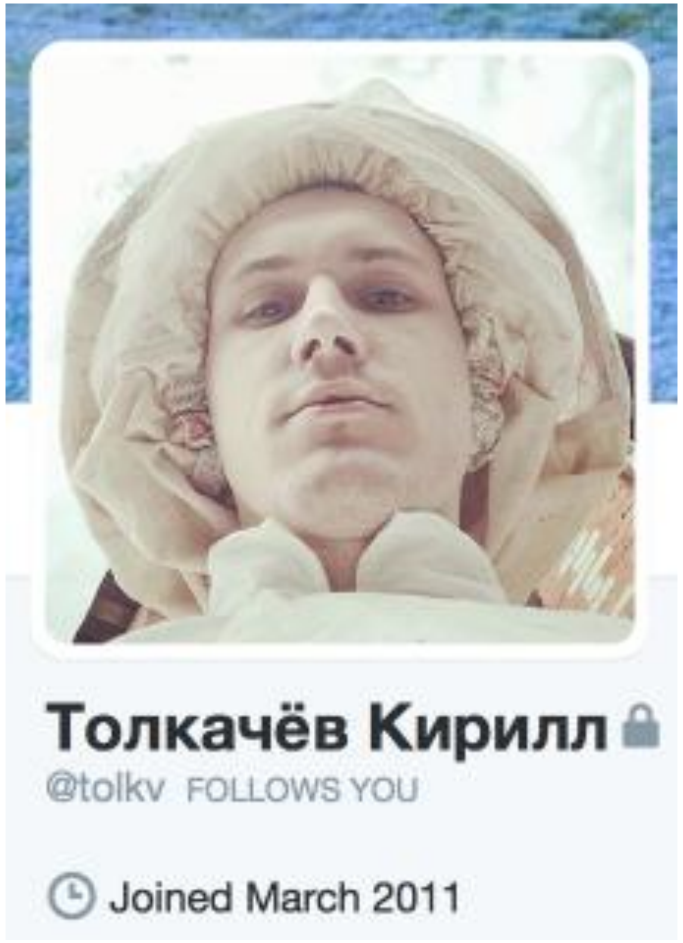
```
Class<THERE_CAN_BE_ONLY_ONE> clazz = (THERE_CAN_BE_ONLY_ONE as Class)
```

```
class MacLeod {

    THERE_CAN_BE_ONLY_ONE getTHERE_CAN_BE_ONLY_ONE() {
            Class<THERE_CAN_BE_ONLY_ONE> clazz = (THERE_CAN_BE_ONLY_ONE as Class)
        return clazz.newInstance()
    }

}
```

```
class MacLeod {

    THERE_CAN_BE_ONLY_ONE getTHERE_CAN_BE_ONLY_ONE() {
                Class<THERE_CAN_BE_ONLY_ONE> clazz = (getTHERE_CAN_BE_ONLY_ONE() as Class)
        return clazz.newInstance()
    }

}
```

Let's Fix It!

And the t-shirt goes to…



Толкачёв Кирилл

@tolkv FOLLOWS YOU

Joined March 2011

MISSED ME?

```
@groovy.transform.InheritConstructors
class TreaayeMap extends HashMap {
}

TreaayeMap a = [5]
TreaayeMap b = [6]

println "${a.getClass()} ${a.equals(b)}"
```

A. **class HashMap true**
B. **class TreaayeMap false**
C. **class TreaayeMap true**
D. **class HashMap false**

HANGTHECODE

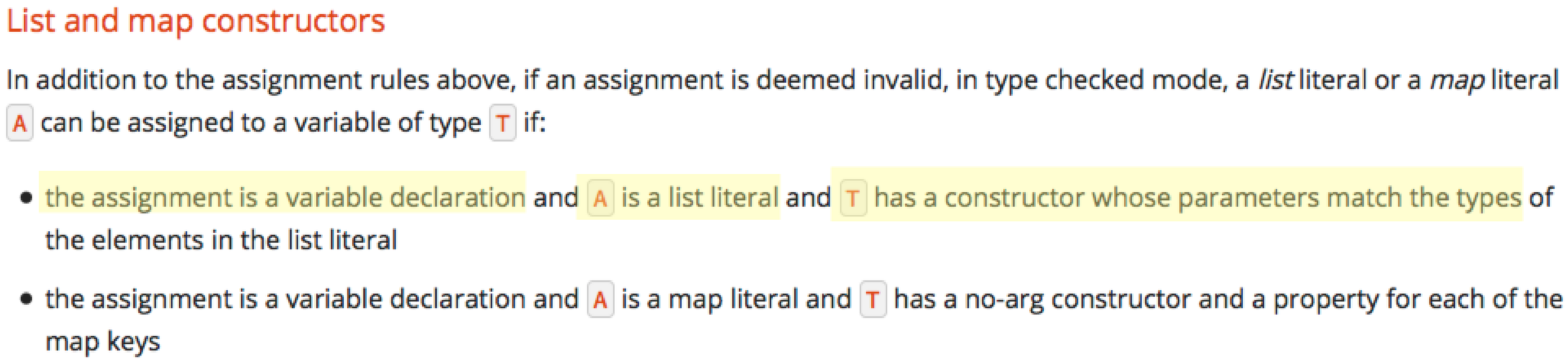
T.F.M.
RTFM!

List and map constructors

In addition to the assignment rules above, if an assignment is deemed invalid, in type checked mode, a *list* literal or a *map* literal `A` can be assigned to a variable of type `T` if:

- the assignment is a variable declaration and `A` is a list literal and `T` has a constructor whose parameters match the types of the elements in the list literal
- the assignment is a variable declaration and `A` is a map literal and `T` has a no-arg constructor and a property for each of the map keys

```
TreaayeMap a = [5]
```



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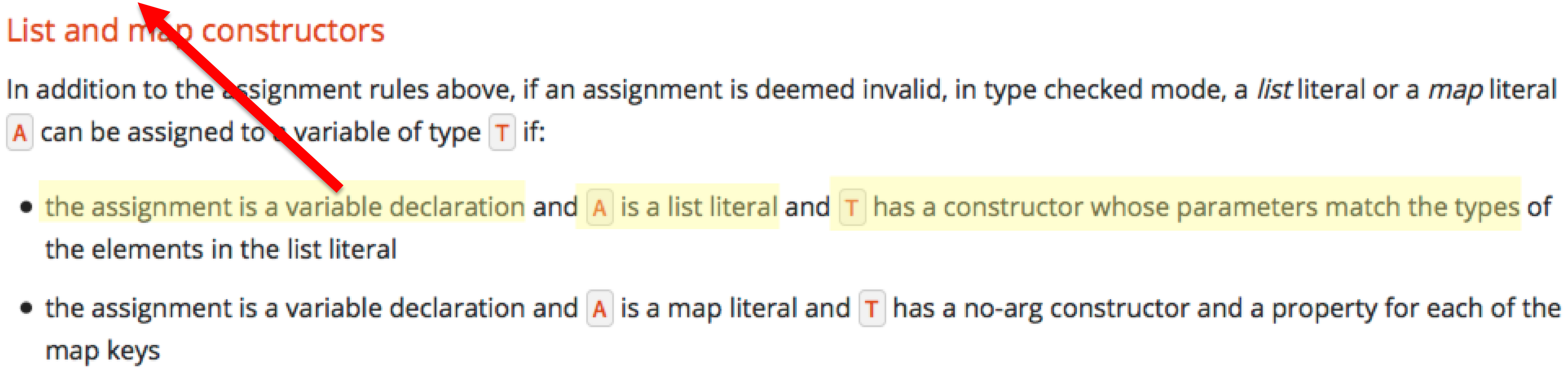
TreaayeMap a = [5]



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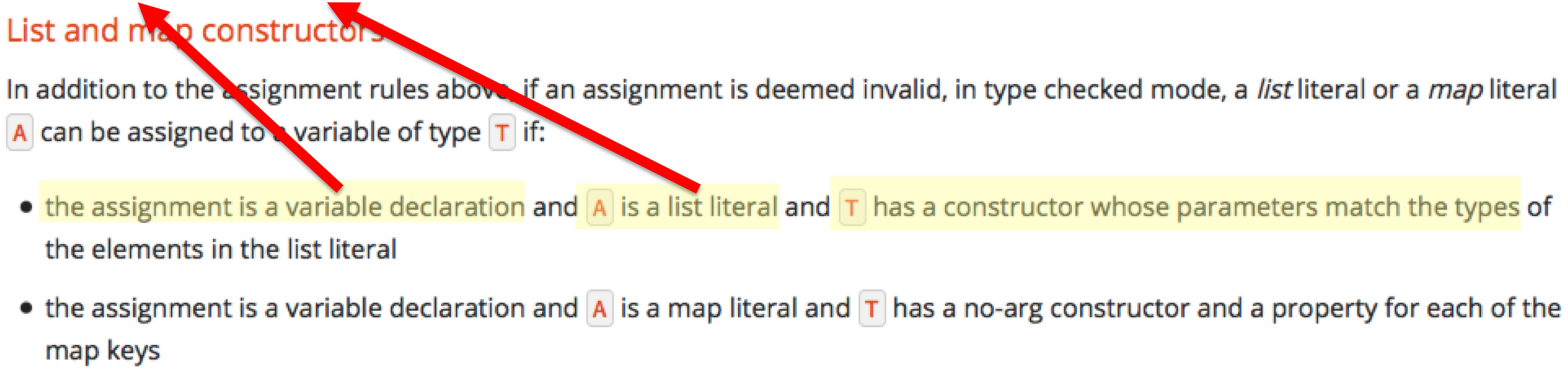
TreaayeMap a = [5]



List and map constructors

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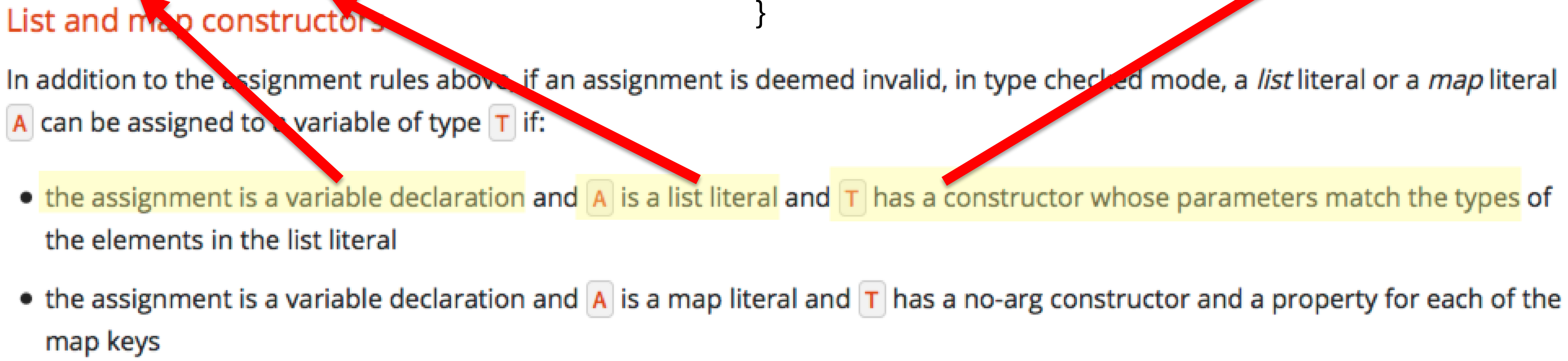
```groovy
TreaayeMap a = [5]
```

```groovy
@groovy.transform.InheritConstructors
class TreaayeMap extends HashMap {
}
```



List and map constructors

In addition to the assignment rules above, if an assignment is deemed invalid, in type checked mode, a *list* literal or a *map* literal `A` can be assigned to a variable of type `T` if:

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```
/**
 * Constructs an empty <tt>HashMap</tt> with the specified initial
 * capacity and the default load factor (0.75).
 *
 * @param  initialCapacity the initial capacity.
 * @throws IllegalArgumentException if the initial capacity is negative.
 */
public HashMap(int initialCapacity)
```

```
@groovy.transform.InheritConstructors
class TreaayeMap extends HashMap {
}
```

```
TreaayeMap a = [5]
```

List and map constructors

In addition to the assignment rules above, if an assignment is deemed invalid, in type checked mode, a *list* literal or a *map* literal `A` can be assigned to a variable of type `T` if:

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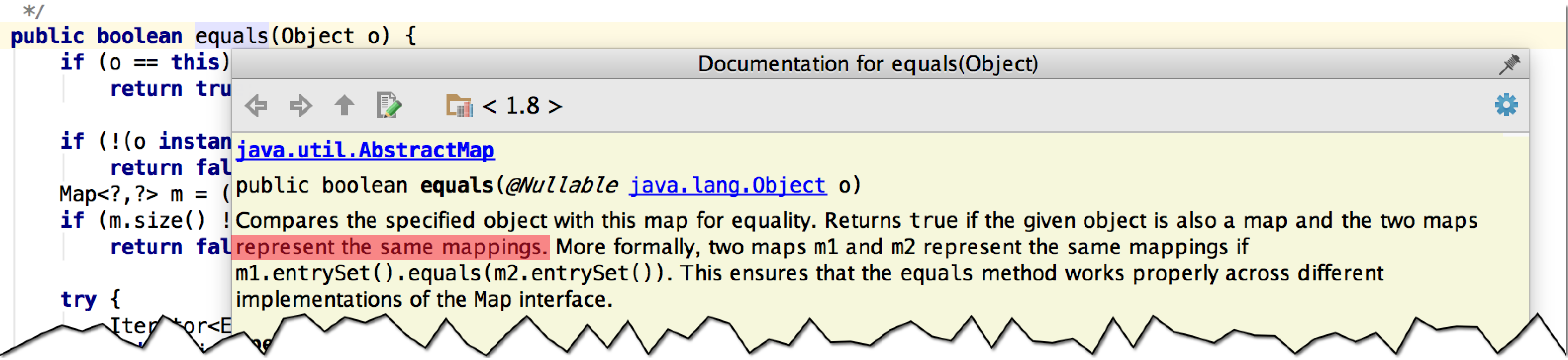
equals() doesn’t care about capacity, mappings only



```
 */
public boolean equals(Object o) {
    if (o == this)
        return tru
    
    if (!(o instan
        return fal
    Map<?,?> m = (
    if (m.size() !
        return fal

    try {
        Iter tor<E
```

Documentation for equals(Object)

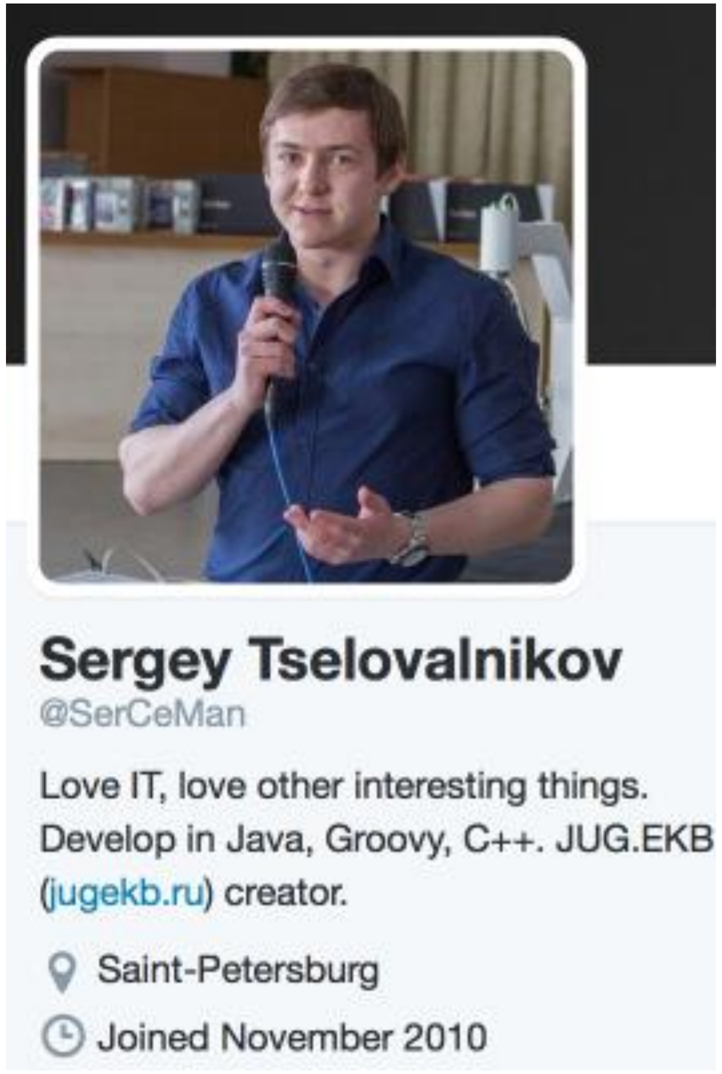
< 1.8 >

java.util.AbstractMap

`public boolean equals(@Nullable java.lang.Object o)`

Compares the specified object with this map for equality. Returns `true` if the given object is also a map and the two maps represent the same mappings. More formally, two maps `m1` and `m2` represent the same mappings if `m1.entrySet().equals(m2.entrySet())`. This ensures that the equals method works properly across different implementations of the Map interface.

And the t-shirt goes to…

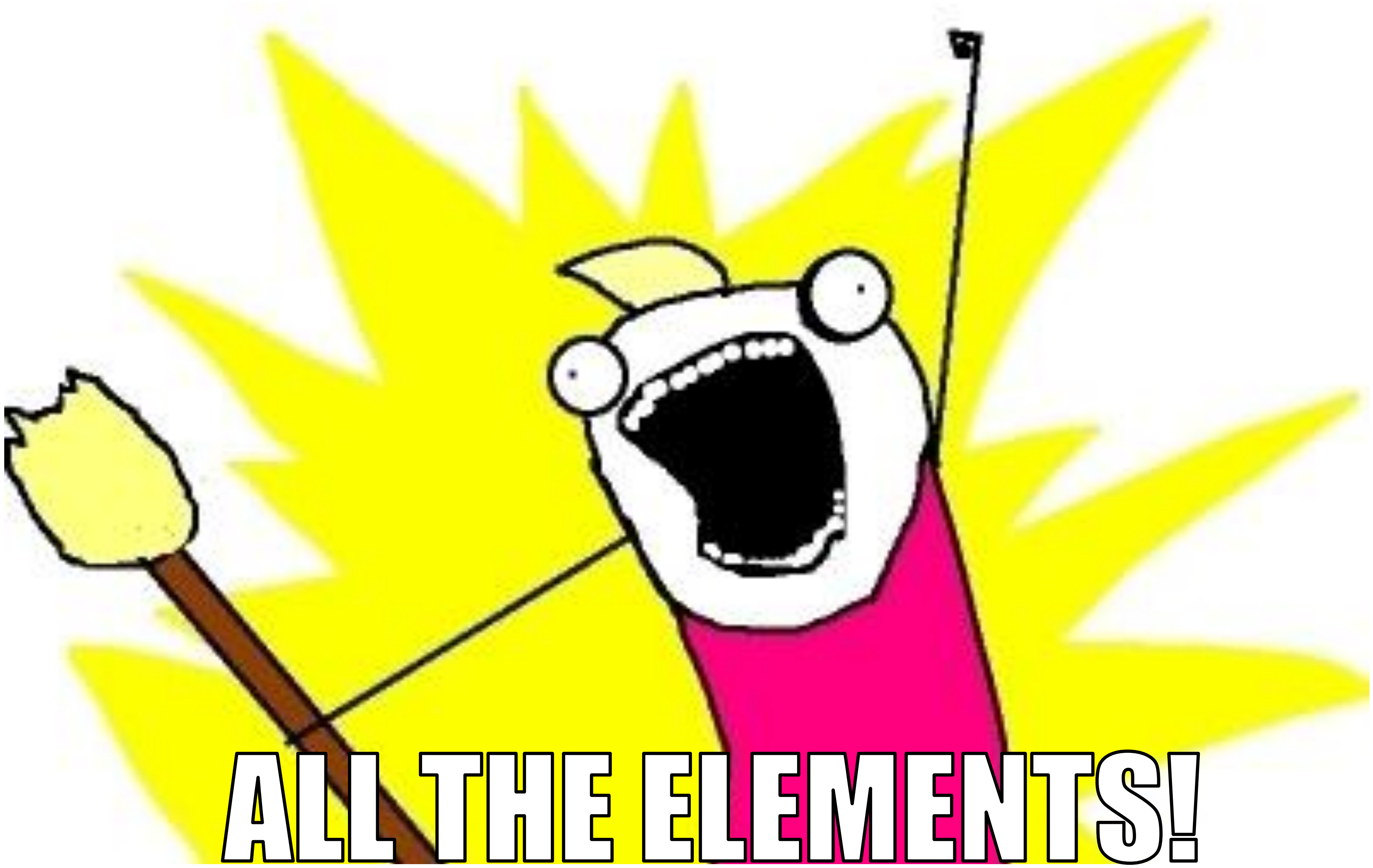


Sergey Tselovalnikov
@SerCeMan

Love IT, love other interesting things. Develop in Java, Groovy, C++. JUG.EKB (jugekb.ru) creator.

Saint-Petersburg

Joined November 2010


COLLECT
ALL THE ELEMENTS!

```
class Kitty { def fur }
def kitties = [new Kitty(fur: 'soft'),new Kitty(fur: 'warm'),new Kitty(fur: 'purr') ]

println kitties.collect { it.fur }
println kitties*.fur
println kitties.fur
```

How many of the printed lines will be the same?

A. All different

B. 2 si[illegible] one different

C. All the same

D. W

```
class Kitty { def fur }
def kitties

println kitties.collect { it.fur }
println kitties*.fur
println kitties.fur
```

How many of the printed lines will be the same?

A. All different

B. 2 similar, one different

C. All the same

```
class Kitty { def fur }
def kitties

println kitties.fur
```

```
class Kitty { def fur }
def kitties

println kitties.fur
```

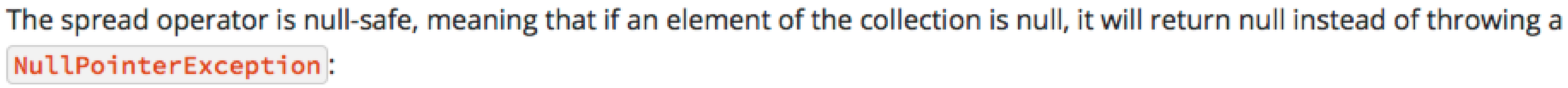
```
class Kitty { def fur }
def kitties

println kitties.collect { it.fur  }
```

```
class Kitty { def fur }
def kitties

println kitties.collect { it.fur  }
```

```
public static Collection asCollection(Object value) {
    if (value == null) {
        return Collections.EMPTY_LIST;
    }
     …
}
```

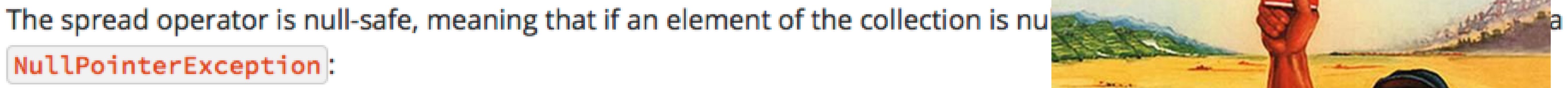
```
class Kitty { def fur }
def kitties

println kitties*.fur
```

```
class Kitty { def fur }
def kitties

println kitties*.fur
```



The spread operator is null-safe, meaning that if an element of the collection is null, it will return null instead of throwing a `NullPointerException`:

```
class Kitty { def fur }
def kitties

println kitties*.fur
```

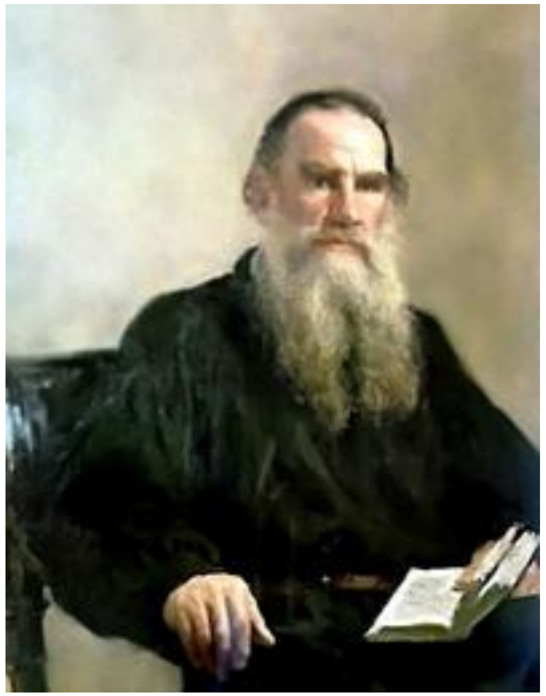


The spread operator is null-safe, meaning that if an element of the collection is nu a
`NullPointerException`:

Consistency, yeah.

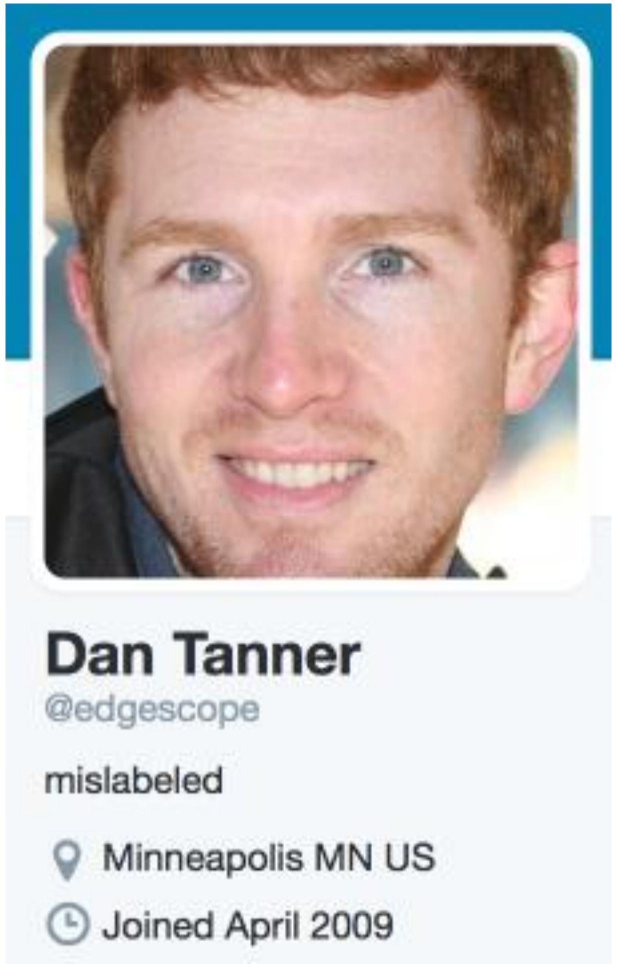
```
[]
null
Caught:
java.lang.NullPointerException:
Cannot get property 'fur' on null object
```

“All happy families are alike; each unhappy family is unhappy in its own way.”



Leo Tolstoy, “Anna Karenina”

And the t-shirt goes to…



Dan Tanner

@edgescope

mislabeled

Minneapolis MN US

Joined April 2009

BLACKHAWK!
BLACKHAWK!

```
ArrayList<String> expendables = ['Arnold', 'Chuck', Sly']
def expendable = //someone from the list

for(String hero in expendables) {
    if(hero == expendable){
            expendables.remove(hero)
    }
}

println expendables
```

Which one won't cause a ConcurrentModificationException?

```
ArrayList<String> expendables = ['Arnold', 'Chuck', Sly']
def expendable = //someone from the list

for(String hero in expendables) {
    if(hero == expendable){
                expendables.remove(hero)
    }
}

println expendables
```

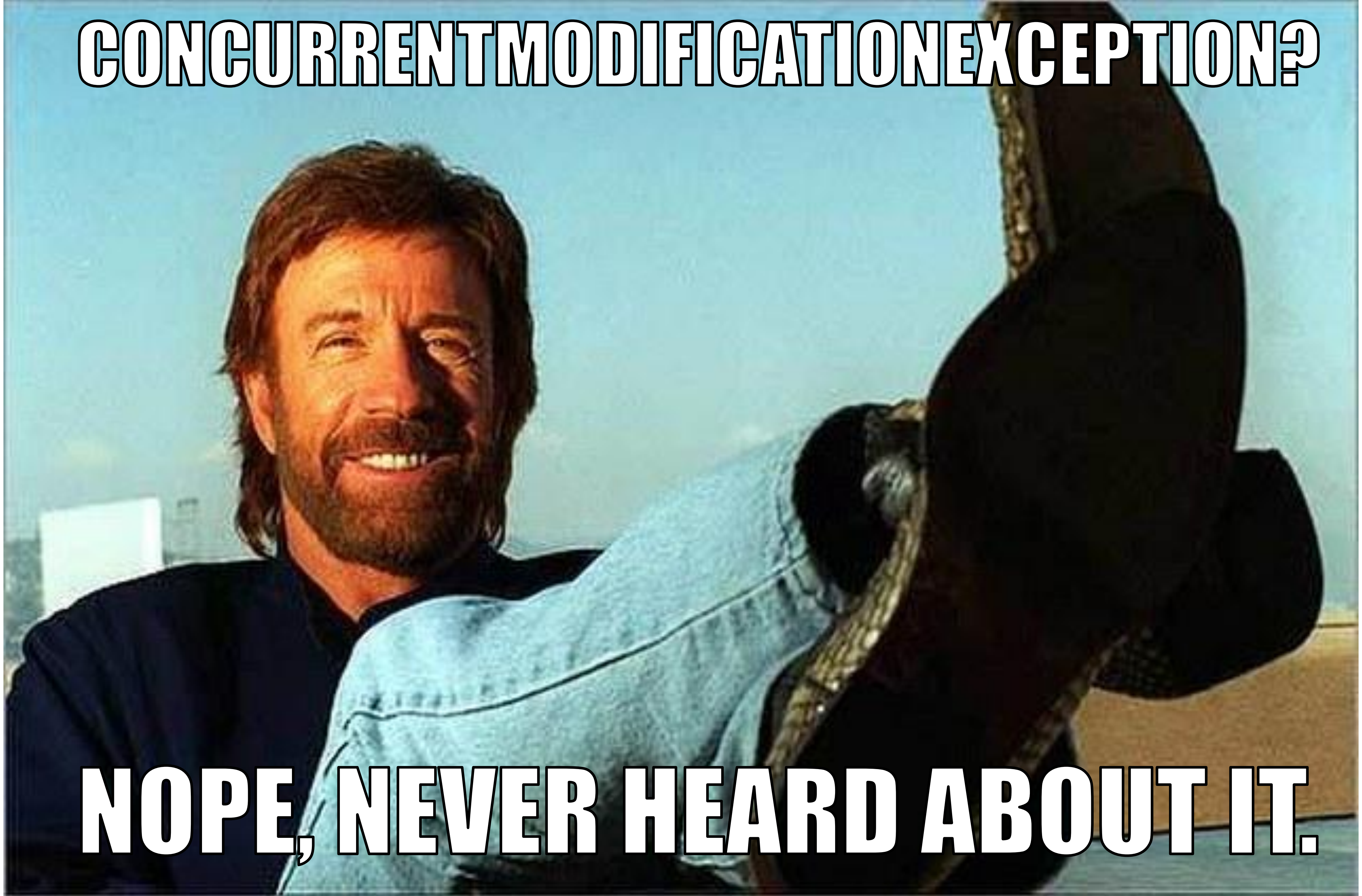
A. Can't avoid CME

B. Arnold

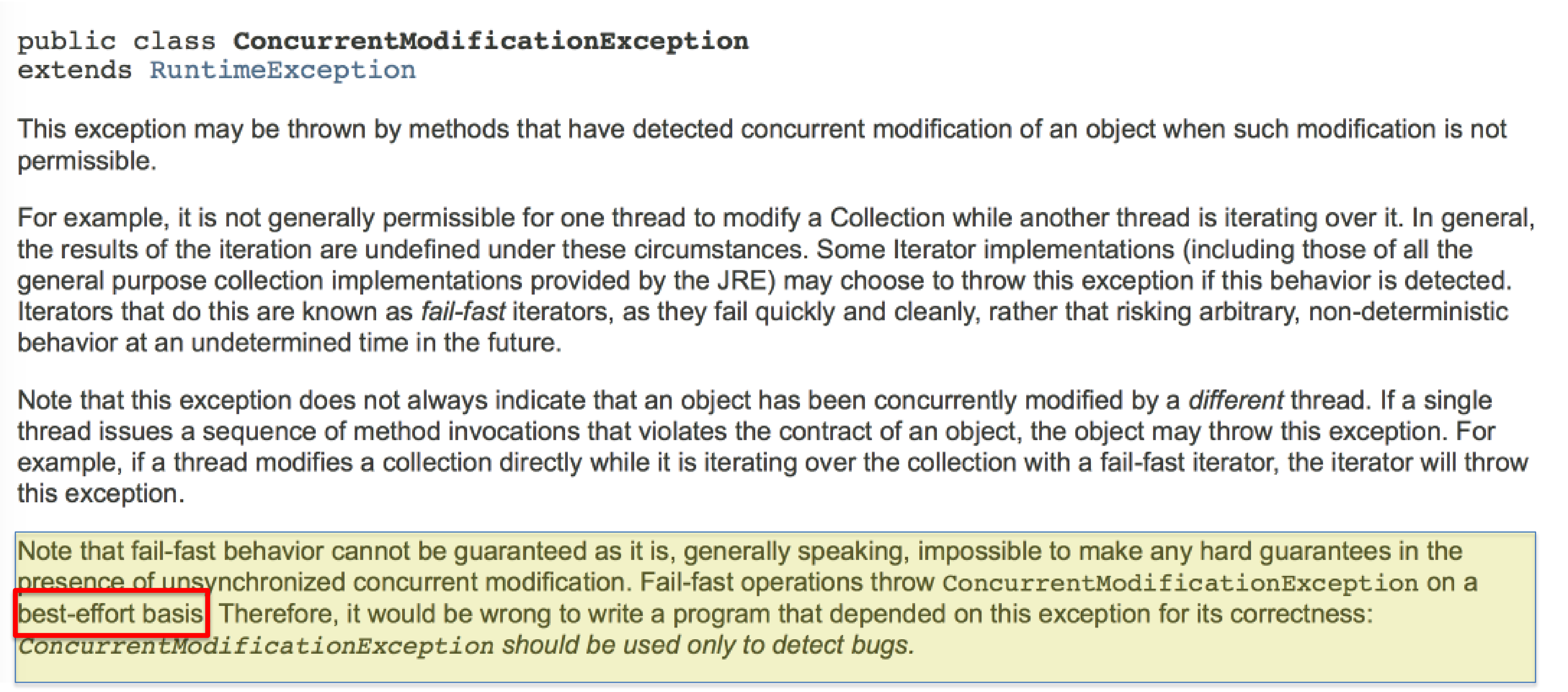
C. C

D. Sly

GIFSec.com


CONCURRENTMODIFICATIONEXCEPTION?
NOPE, NEVER HEARD ABOUT IT.

You have been warned.



```
public class ConcurrentModificationException
extends RuntimeException
```

This exception may be thrown by methods that have detected concurrent modification of an object when such modification is not permissible.

For example, it is not generally permissible for one thread to modify a Collection while another thread is iterating over it. In general, the results of the iteration are undefined under these circumstances. Some Iterator implementations (including those of all the general purpose collection implementations provided by the JRE) may choose to throw this exception if this behavior is detected. Iterators that do this are known as *fail-fast* iterators, as they fail quickly and cleanly, rather that risking arbitrary, non-deterministic behavior at an undetermined time in the future.

Note that this exception does not always indicate that an object has been concurrently modified by a *different* thread. If a single thread issues a sequence of method invocations that violates the contract of an object, the object may throw this exception. For example, if a thread modifies a collection directly while it is iterating over the collection with a fail-fast iterator, the iterator will throw this exception.

Note that fail-fast behavior cannot be guaranteed as it is, generally speaking, impossible to make any hard guarantees in the presence of unsynchronized concurrent modification. Fail-fast operations throw `ConcurrentModificationException` on a best-effort basis. Therefore, it would be wrong to write a program that depended on this exception for its correctness: *`ConcurrentModificationException` should be used only to detect bugs.*

Let’s decompile this, baby!

```
List expendables = Arrays.asList(new String[]{"Arnold", "Chuck", " Sly"});
String expendable = "Chuck";
Iterator iterator = expendables.iterator();

while(iterator.hasNext()) {
    String hero = (String)iterator.next();
    if(hero.equals(expendable)) {
        expendables.remove(hero);
    }
}
```

```
while(iterator.hasNext()) {
    String hero = (String)iterator.next();
    if(hero.equals(expendable)) {
 //      expendables.remove(hero);
    }
}
```

```
while(iterator.hasNext()) {
    String hero = (String)iterator.next();
    if(hero.equals(expendable)) {
//      expendables.remove(hero);
    }
}

public E next() {
    checkForComodification();
    ...
    cursor = i + 1;
}


public boolean hasNext() {
    return cursor != size();
}
```

Modifications are only checked in the next cycle

Getting ready for hasNext() check in the next cycle

Exit on last element +1 == size()

```
while(iterator.hasNext()) {
    String hero = (String)iterator.next();
    if(hero.equals(expendable)) {
//      expendables.remove(hero);
    }
}

public E next() {
    checkForComodification();
    ...
    cursor = i + 1;
}


public boolean hasNext() {
    return cursor != size();
}
```

After Sly cursor is 3

And size is 3 as well

All good. Now let's mess with it

```
while(iterator.hasNext()) {
    String hero = (String)iterator.next();
    if(hero.equals(expendable)) {
        expendables.remove(hero);
    }
}

public E next() {
    checkForComodification();
    …
    cursor = i + 1;
}


public boolean hasNext() {
    return cursor != size();
}
```

After Chuck the cursor is 2

Then we remove the element

And now the size now is 2!

It won’t get to the next() to run

Hey, what about me?!

```
while(iterator.hasNext()) {
    String hero = (String)iterator.next();
    if(hero.equals(expendable)) {
        expendables.remove(hero);
    }
}

public E next() {
    checkForComodification();
    ...
    cursor = i + 1;
}


public boolean hasNext() {
    return cursor != size();
}
```

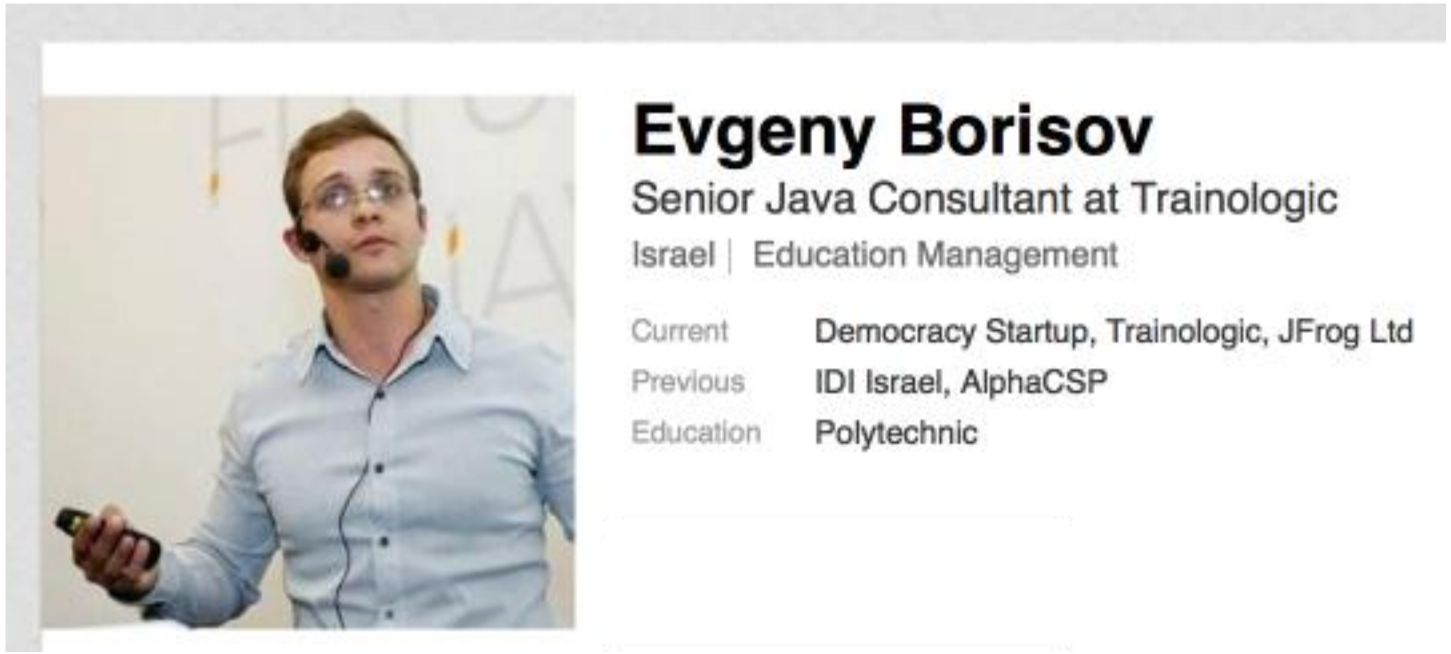
After Sly the cursor is 3

Then we remove the element

But the size now is 2!

It will go to another loop and fail on checkForComodification!

And the t-shirt goes to…

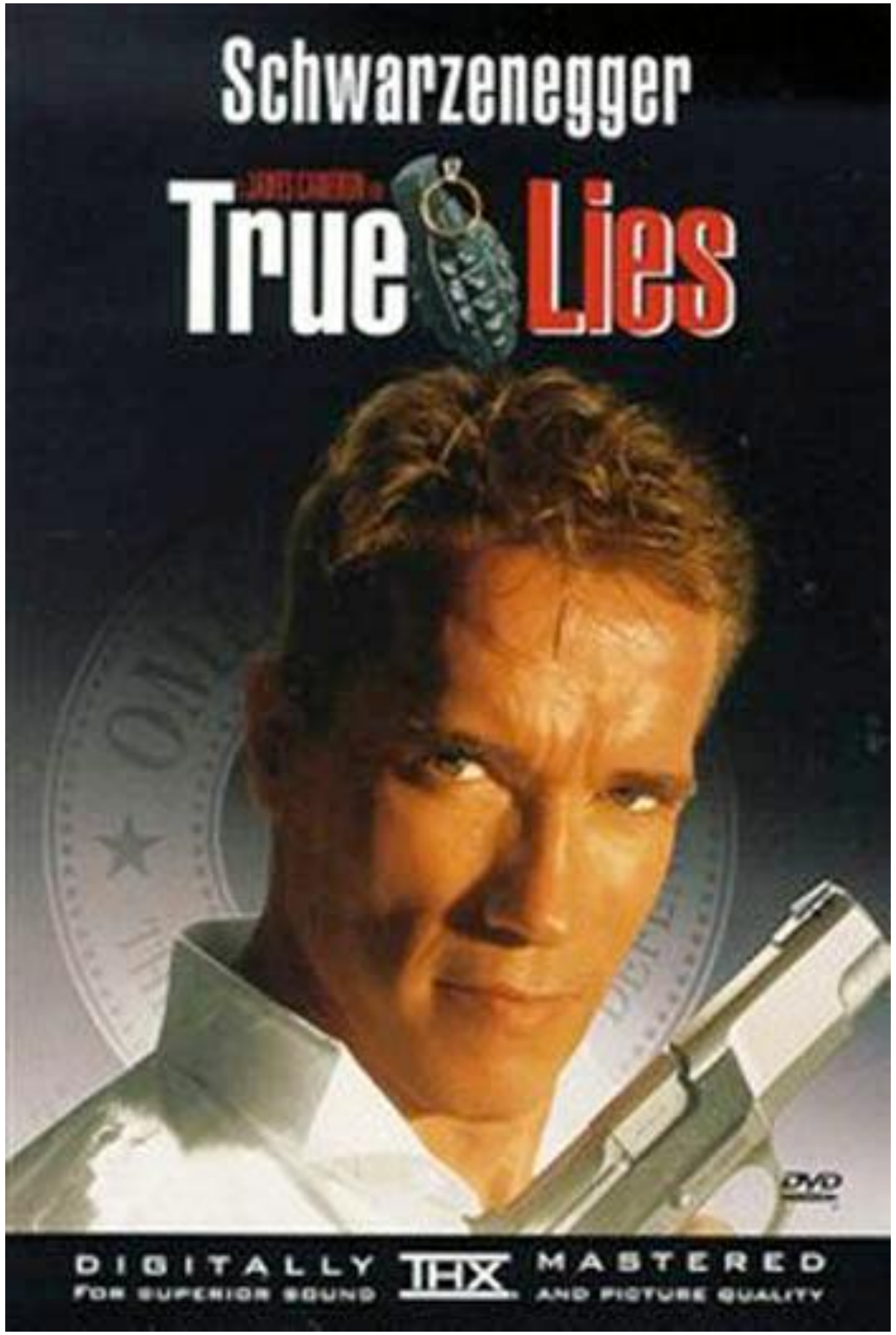


Evgeny Borisov

Senior Java Consultant at Trainologic

Israel | Education Management

Current	Democracy Startup, Trainologic, JFrog Ltd
Previous	IDI Israel, AlphaCSP
Education	Polytechnic


Schwarzenegger
James Cameron's
True Lies
DVD
DIGITALLY THX MASTERED
FOR SUPERIOR SOUND AND PICTURE QUALITY

```
String truth = 'false'
boolean groovyTruth = truth
println groovyTruth
```

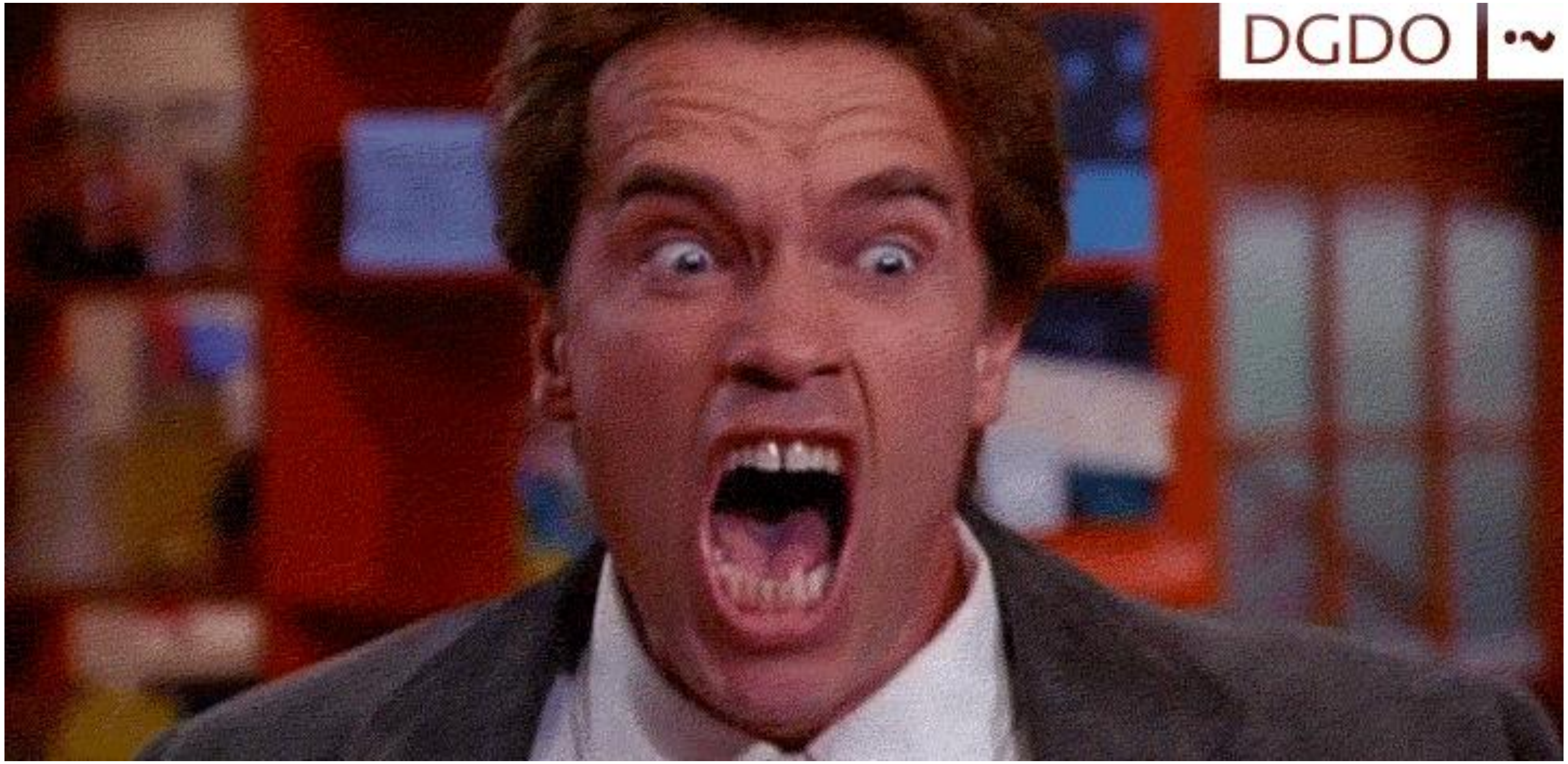
```
String truth = 'false'
boolean groovyTruth = truth
println groovyTruth
```

A.false

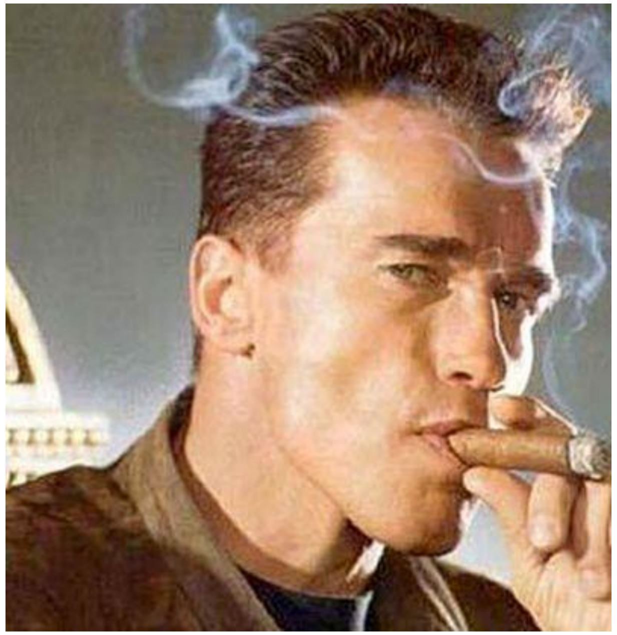
B.true

C.ClassCastException

D.Startup error


DGDO

T.F.M.
RTFM!

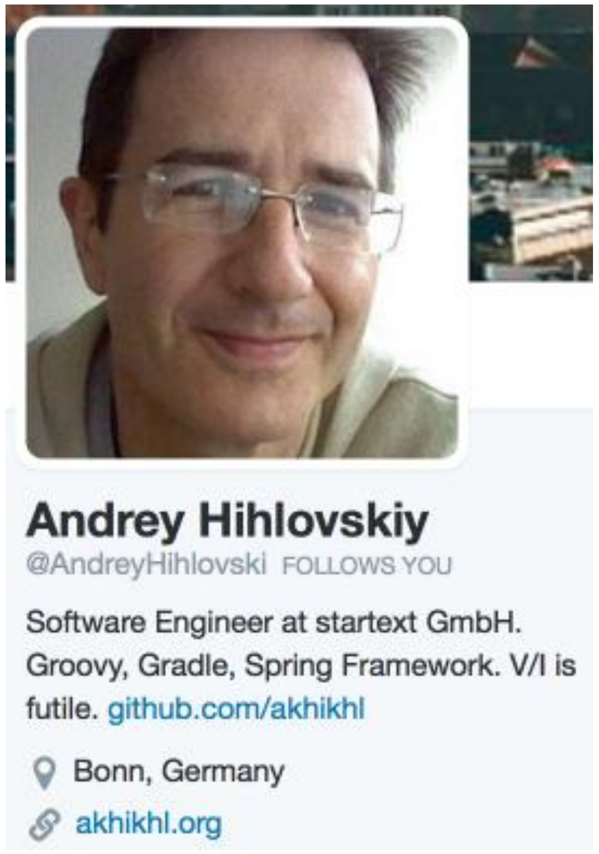


§ Strings

Non-empty Strings, GStrings and CharSequences are coerced to true.

```
assert 'a'
assert !''
def nonEmpty = 'a'
assert "$nonEmpty"
def empty = ''
assert !"$empty"
```

And the t-shirt goes to…

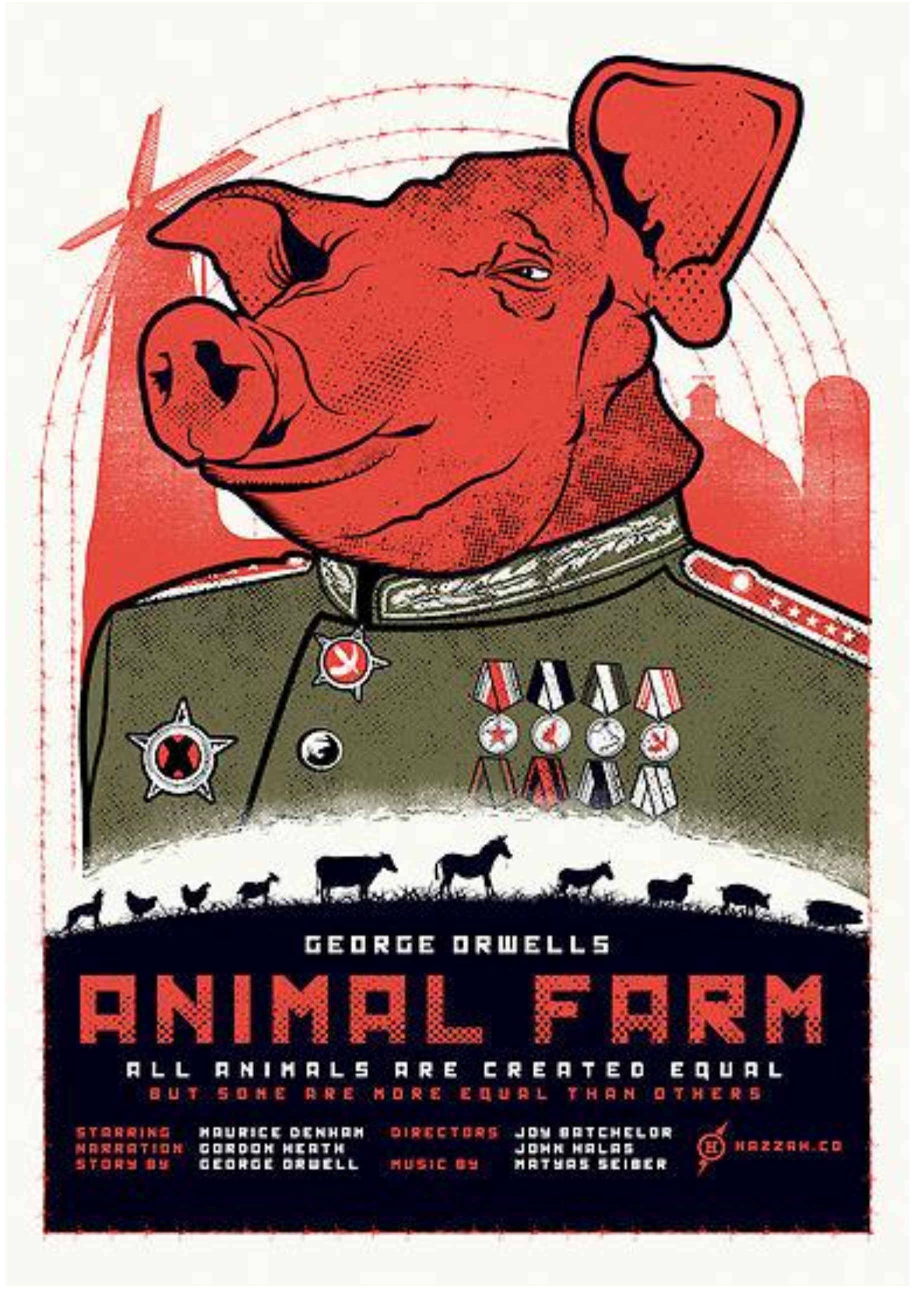


Andrey Hihlovskiy
@AndreyHihlovski FOLLOWS YOU

Software Engineer at startext GmbH. Groovy, Gradle, Spring Framework. V/I is futile. github.com/akhikhl

Bonn, Germany

akhikhl.org


GEORGE ORWELLS
ANIMAL FARM
ALL ANIMALS ARE CREATED EQUAL
BUT SOME ARE MORE EQUAL THAN OTHERS
STARRING MAURICE DENHAM
NARRATION GORDON HEATH
STORY BY GEORGE ORWELL
DIRECTORS JOY BATCHELOR
JOHN HALAS
MUSIC BY MATYAS SEIBER
HAZZAH.CO

```
assert 1L == 1
println
1L.equals(1)
```

A. Assertion failed
B. true
C.
D. MissingMethodException

T.F.M.
RTFM!

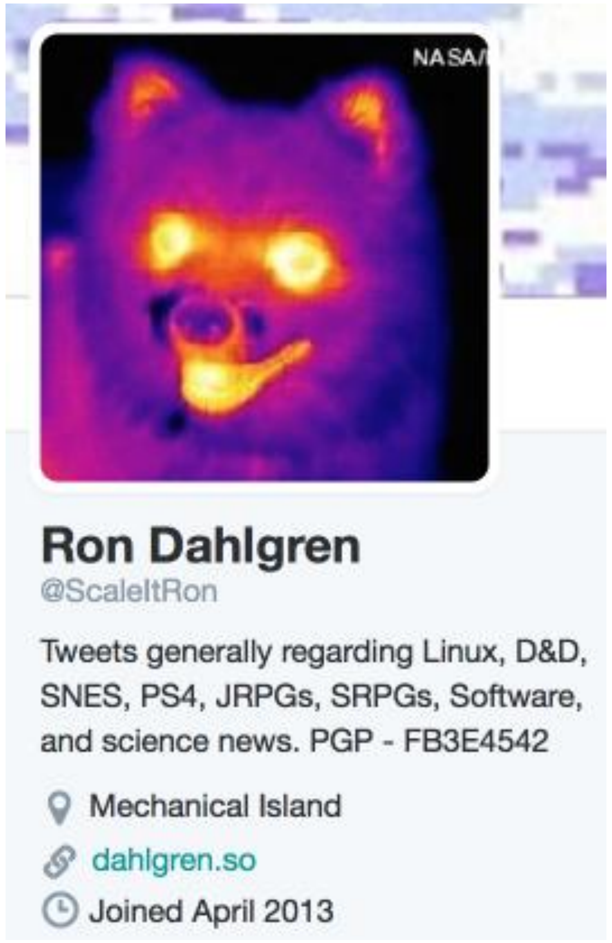
10. Behaviour of `==`

In Java `==` means equality of primitive types or identity for objects. In Groovy `==` translates to `a.compareTo(b)==0`, iff they are `Comparable`, and `a.equals(b)` otherwise. To check for identity, there is `is`. E.g. `a.is(b)`.

```java
/**
 * Compare two Numbers.  Equality (==) for numbers dispatches to this.
 *
 * @param left  a Number
 * @param right another Number to compare to
 * @return the comparison of both numbers
 * @since 1.0
 */
public static int compareTo(Number left, Number right) {
    /** @todo maybe a double dispatch thing to handle new large numbers? */
    return NumberMath.compareTo(left, right);
}
```

```java
/**
 * Compares this object to the specified object.  The result is
 * {@code true} if and only if the argument is not
 * {@code null} and is a {@code Long} object that
 * contains the same {@code long} value as this object.
 *
 * @param   obj   the object to compare with.
 * @return  {@code true} if the objects are the same;
 *          {@code false} otherwise.
 */
public boolean equals(Object obj) {
    if (obj instanceof Long) {
        return value == ((Long)obj).longValue();
    }
    return false;
}
```

And the t-shirt goes to…



Ron Dahlgren

@ScaleItRon

Tweets generally regarding Linux, D&D, SNES, PS4, JRPGs, SRPGs, Software, and science news. PGP - FB3E4542

Mechanical Island

dahlgren.so

Joined April 2013

```
def numbers = [[2, 3, 5][2, 4, 8][42, 73, Integer.MAX_VALUE, 0]]
println numbers
```

```
def numbers = [[2, 3, 5],[2, 4, 8],[42, 73, Integer.MAX_VALUE, 0]]
println numbers
```

A. [[2, 3, 5], [2, 4, 8], [42, 73, 2147483647, 0]]

B. Won't run

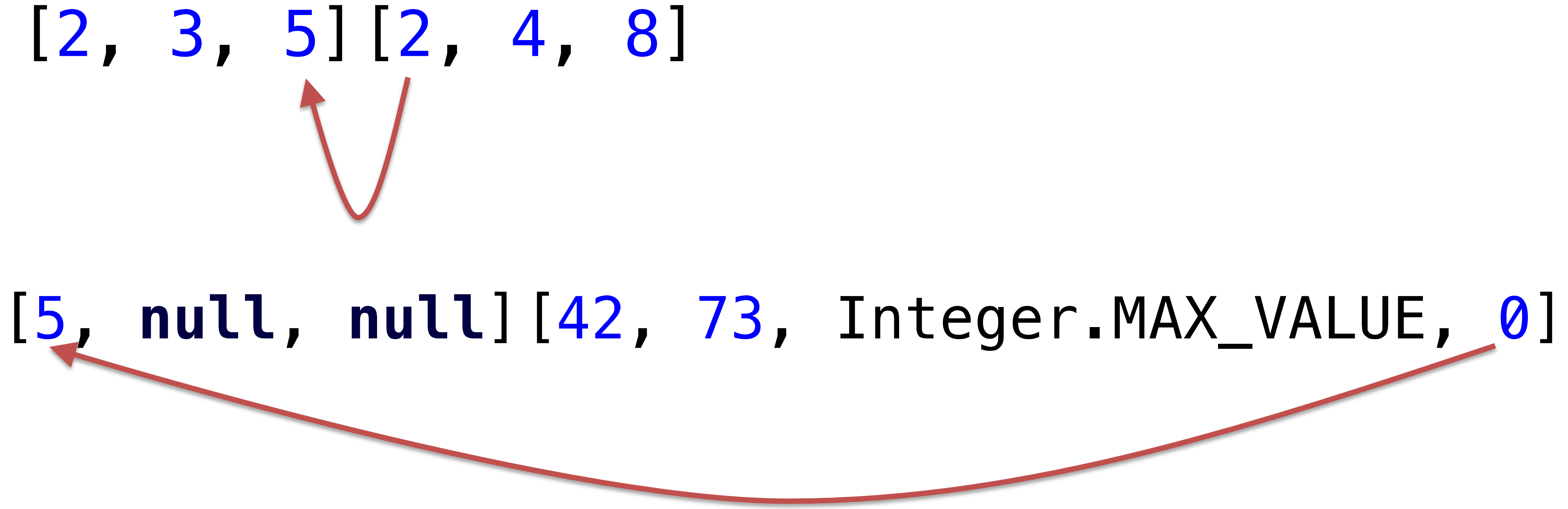
C. [[null, [illegible]ull, 5]]

D. null

ReactionGIFS.me

```
def numbers = [[2, 3, 5][2, 4, 8][42, 73, Integer.MAX_VALUE, 0]]
println numbers
```

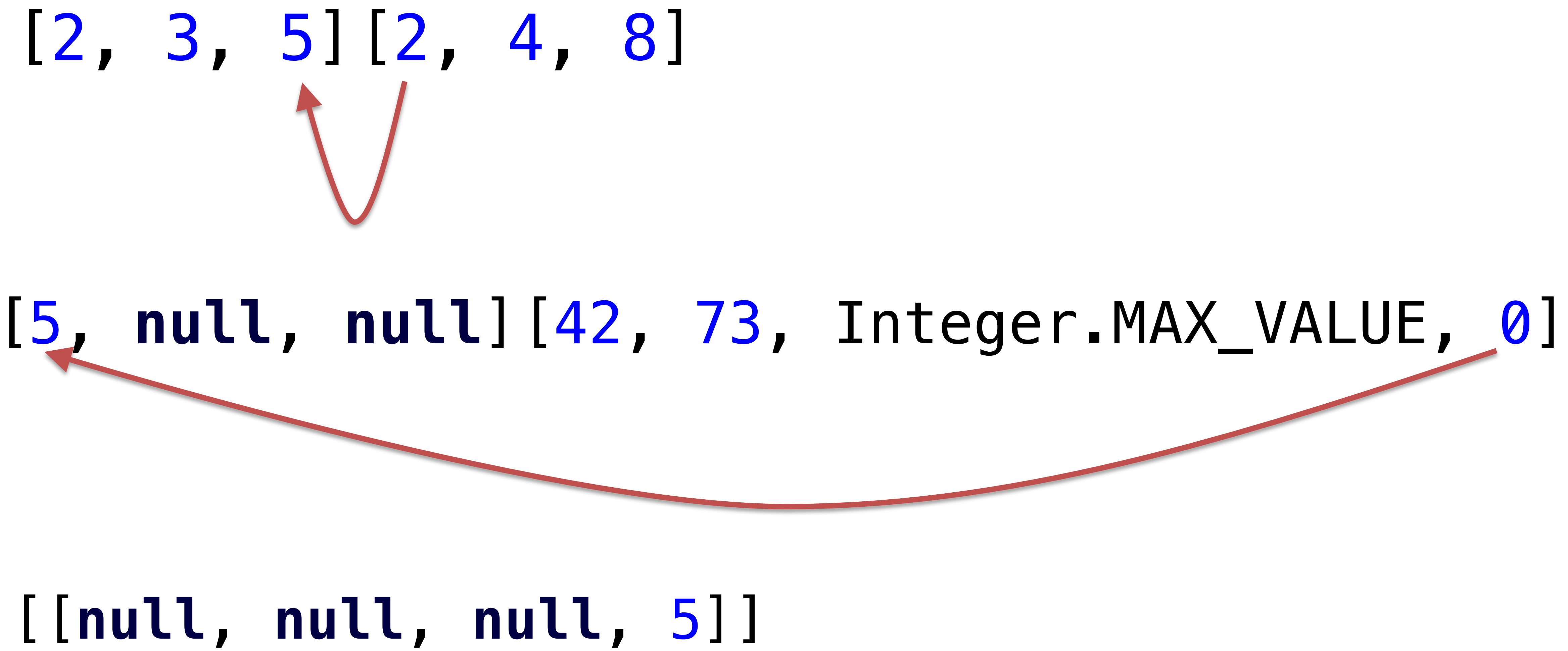
```
assert ['a','b','c'][0,2]==['a','c']
```



```
[2, 3, 5][2, 4, 8]
```

```
[5, null, null][42, 73, Integer.MAX_VALUE, 0]
```

```
def numbers = [[2, 3, 5][2, 4, 8][42, 73, Integer.MAX_VALUE, 0]]
println numbers
```

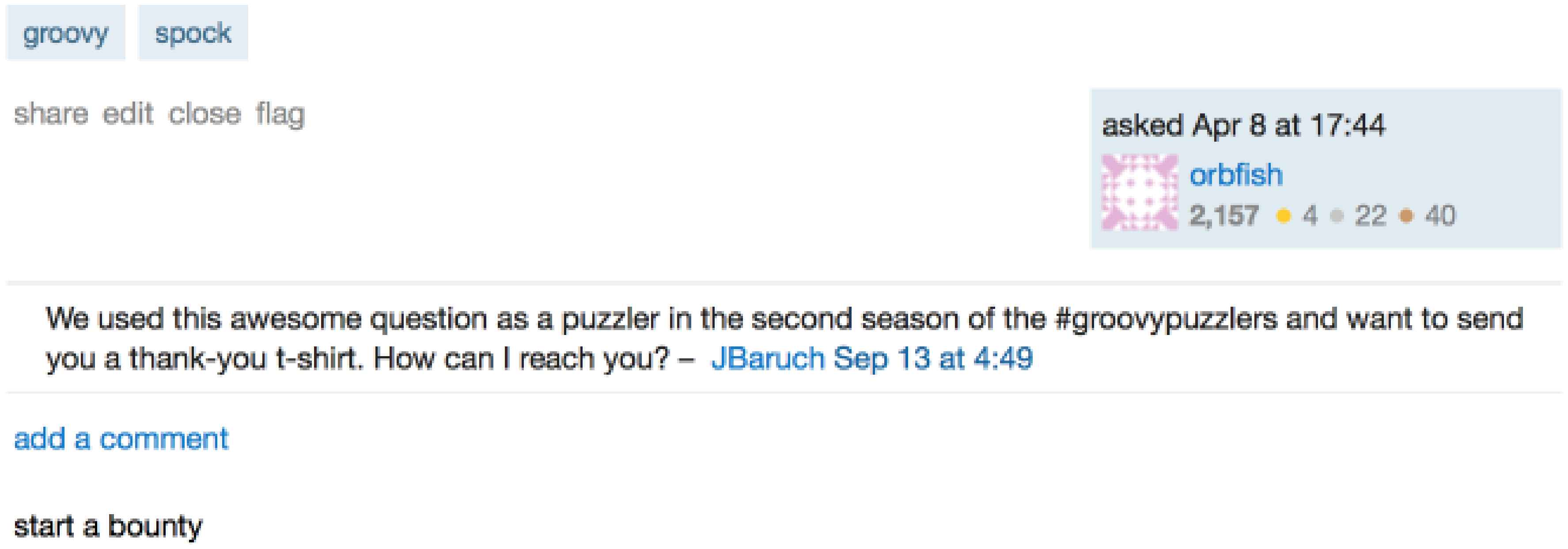


```
[2, 3, 5][2, 4, 8]
```

```
[5, null, null][42, 73, Integer.MAX_VALUE, 0]
```

```
[[null, null, null, 5]]
```

No t-shirt for this guy ☹



groovy spock

share edit close flag

asked Apr 8 at 17:44
orbfish
2,157 ● 4 ● 22 ● 40

We used this awesome question as a puzzler in the second season of the #groovypuzzlers and want to send you a thank-you t-shirt. How can I reach you? – JBaruch Sep 13 at 4:49

add a comment

start a bounty

```
def jailhouseRock
def loveMeTender
def rockAroundTheClock = [1,2,3]

jailhouseRock?:[] + loveMeTender?:[] + rockAroundTheClock?:[]
```

***Yes, we know, it's not Elvis' song.**

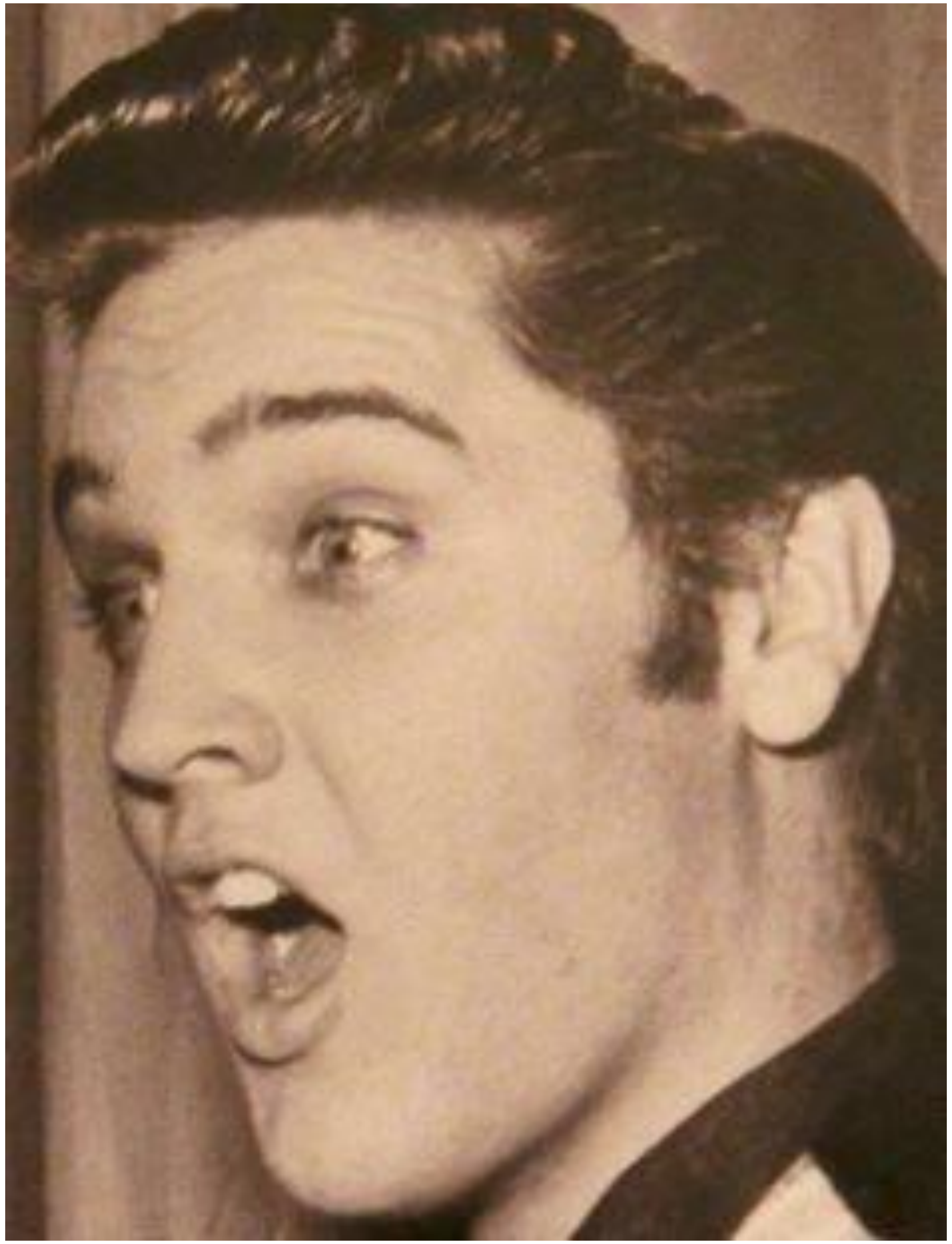
```
def jailhouseRock
def loveMeTender
def rockAroundTheClock = [1,2,3]

jailhouseRock?:[] + loveMeTender?:[] + rockAroundTheClock?:[]
```

A.[illegible]]

B.null

C.[]

D.[1,2,3]



```
def jailhouseRock
def loveMeTender
def rockAroundTheClock = [1,2,3]

jailhouseRock?:[] + loveMeTender?:[] + rockAroundTheClock?:[]
```

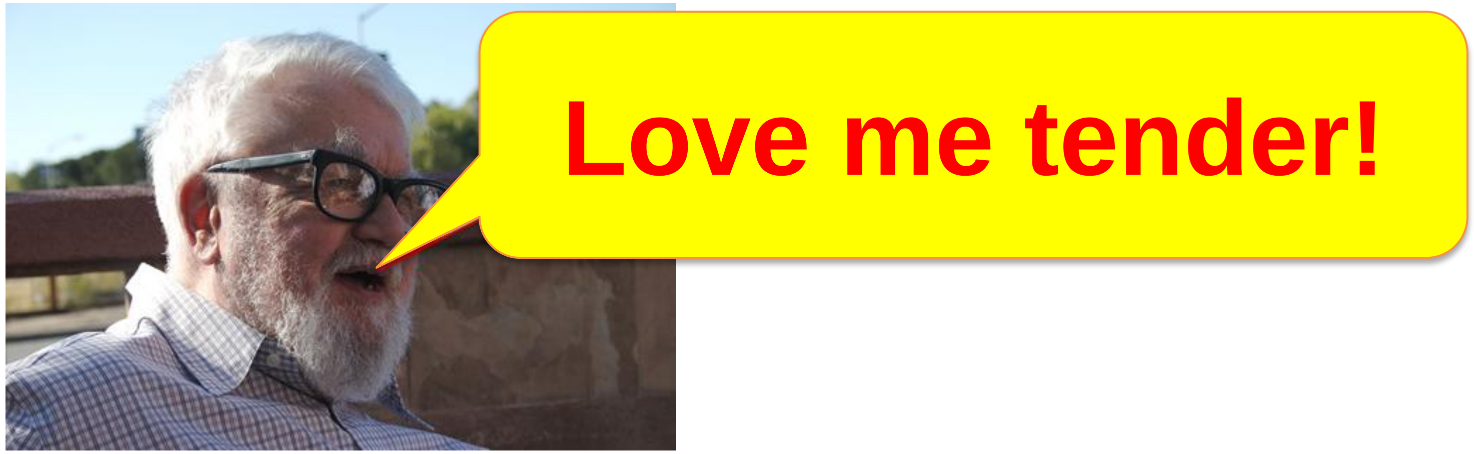
```
def jailhouseRock
def loveMeTender
def rockAroundTheClock = [1,2,3]

jailhouseRock?:[null]?:[] + rockAroundTheClock?:[]
```

```
def jailhouseRock
def loveMeTender
def rockAroundTheClock = [1,2,3]

jailhouseRock?:[null]?:[1,2,3]?:[]
```

```
def jailhouseRock
def loveMeTender
def rockAroundTheClock = [1,2,3]

[null]
```

Let's fix it

```
(jailhouseRock?:[])+(loveMeTender?:[])+(rockAroundTheClock?:[])
```

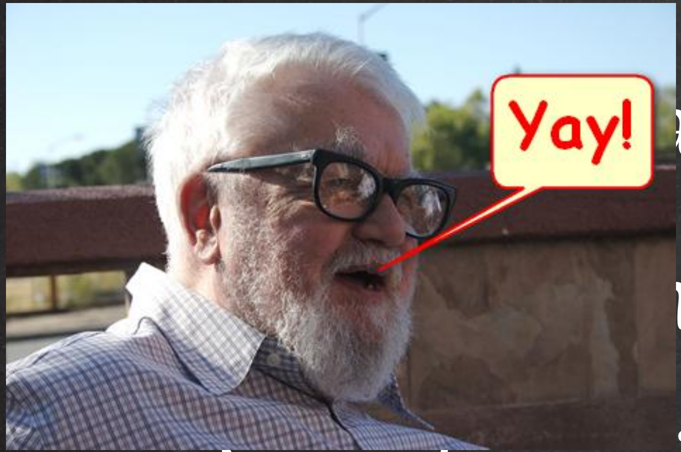


And the t-shirt goes to…

Chris Mihalcik
CMihalcik

Cassidian Communications
Franklin, TN
Joined on 15 Mar 2010

Conclusions



able code

neat tricks

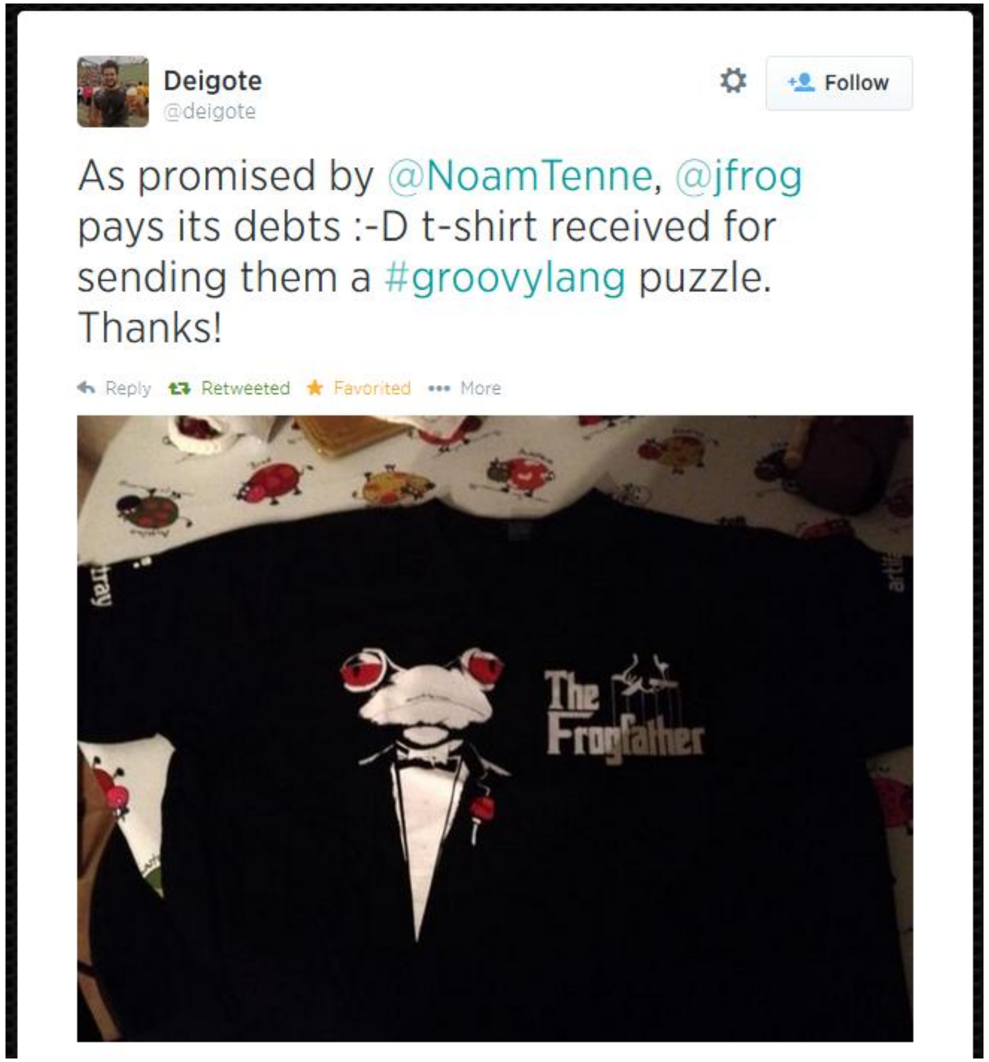
3. Sometimes it is just a bug
4. Use static code analysis (intellij
5. Rtfm
6. Parentheses. Always use Parentheses.

We keep going! (Look at the awesome t-shirts!)

Puzzlers? Gotchas? Fetal position inducing behavior?

- puzzlers jfrog.com
- Groovypuzzlers

Jfrog always pays its debts



Deigote
@deigote

Follow

As promised by @NoamTenne, @jfrog pays its debts :-D t-shirt received for sending them a #groovylang puzzle. Thanks!

Reply Retweeted Favorited More

Iván López
@ilopmar

Follow

I've received an amazing t-shirt from @jfrog for sending them a #Groovylang puzzler. Thank you @NoamTenne :-)

Reply Retweeted Favorite More

Positive feedback?

Fill the feedback form!

Praise us on twitter

#groovypuzzlers

- @Groovypuzzlers
- @tlberglund
- @jbaruch

Negative feeback?

/dev/null

No, Thank you!