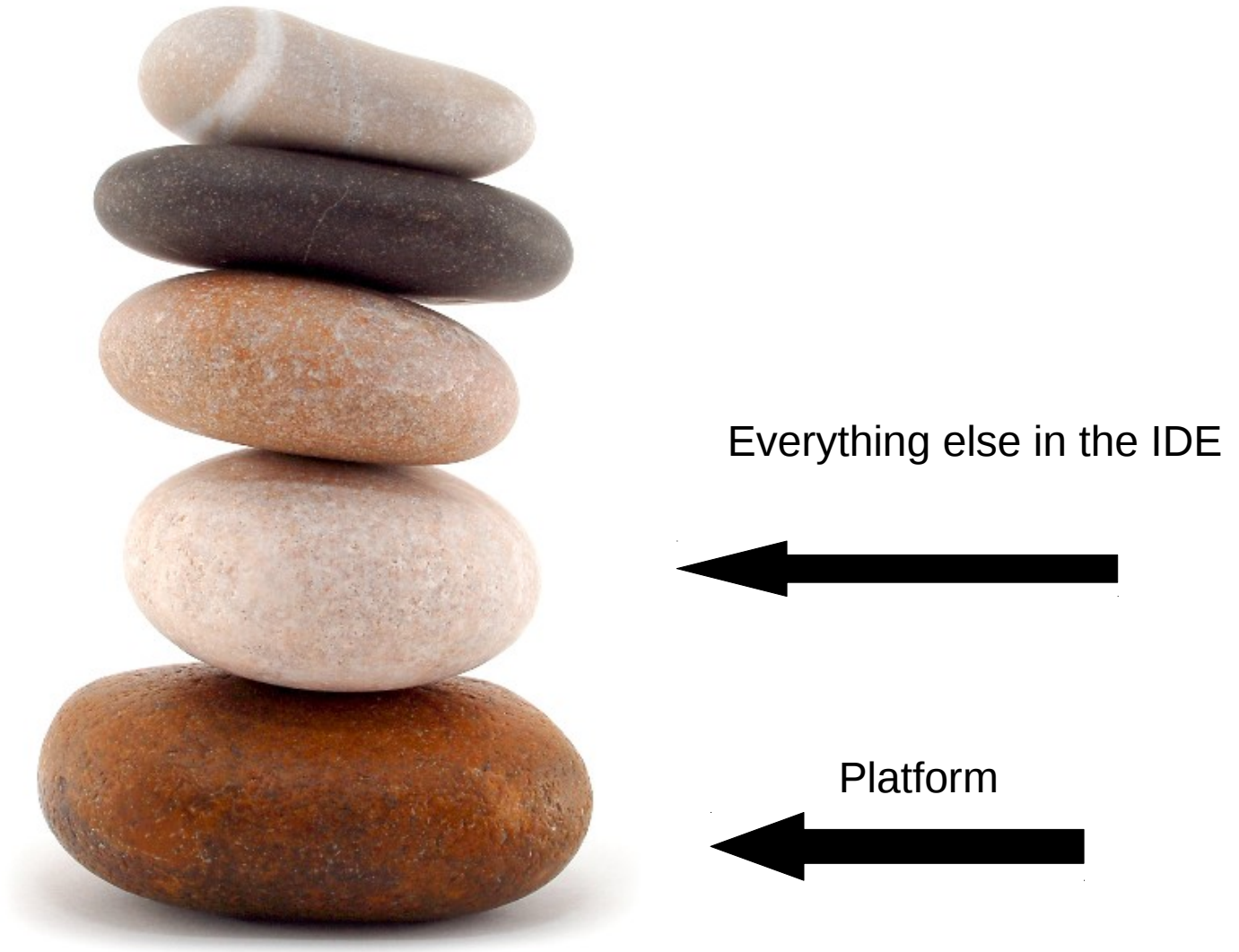




# **Eclipse Platform – Rise and Shine**

**EclipseCon Europe 2015**

# What is the Eclipse platform project?





# Lars Vogel

Eclipse Platform UI and e4  
Project Co-Lead

vogella GmbH CEO, which  
supports customer Eclipse  
RCP implementations and  
trainings







How did we get here?  
Internal work  
Stuff you will like

Disclaimer: I do  
not talk about  
Java 9 support



# Eclipse 4.2

Once upon a time









# Java 8 support

Improve default styling (colors)

**QuickAccess can be hidden**

**Less whitespace usage**

Major improvements in CSS

**New icon set**

DnD color

## Eclipse 4.4

**Dark theme**

Removed annoying splash  
screen message

**Line numbers**

**Toolbar can be hidden**

PerspectiveSwitcher can be  
hidden

New Splashscreen and logo

**UI Installation performance  
much better**

# Performance



# Random developer called Oliver Gierke



Eclipse  
4.4 makes  
me  
like Eclipse  
again

**Better GTK3 support**

**Customize perspective  
dialogs works again**

**Closing projects removes the  
"dead" editors**

**More new icons**

**Hierarchical project view  
in Project Explorer**

# Eclipse 4.5

**Closes tabs to the right / left**

**IDE supports e4 views**

**Faster code completion in JDT**

**New Splashscreen and logo**

**Even better dark theme**

**Better performance with  
parallel jobs and  
interactive UI freeze  
monitor**

# Stuff we do in Eclipse 4.6 (Neon)



Non-user facing  
things

# New committers and contributors

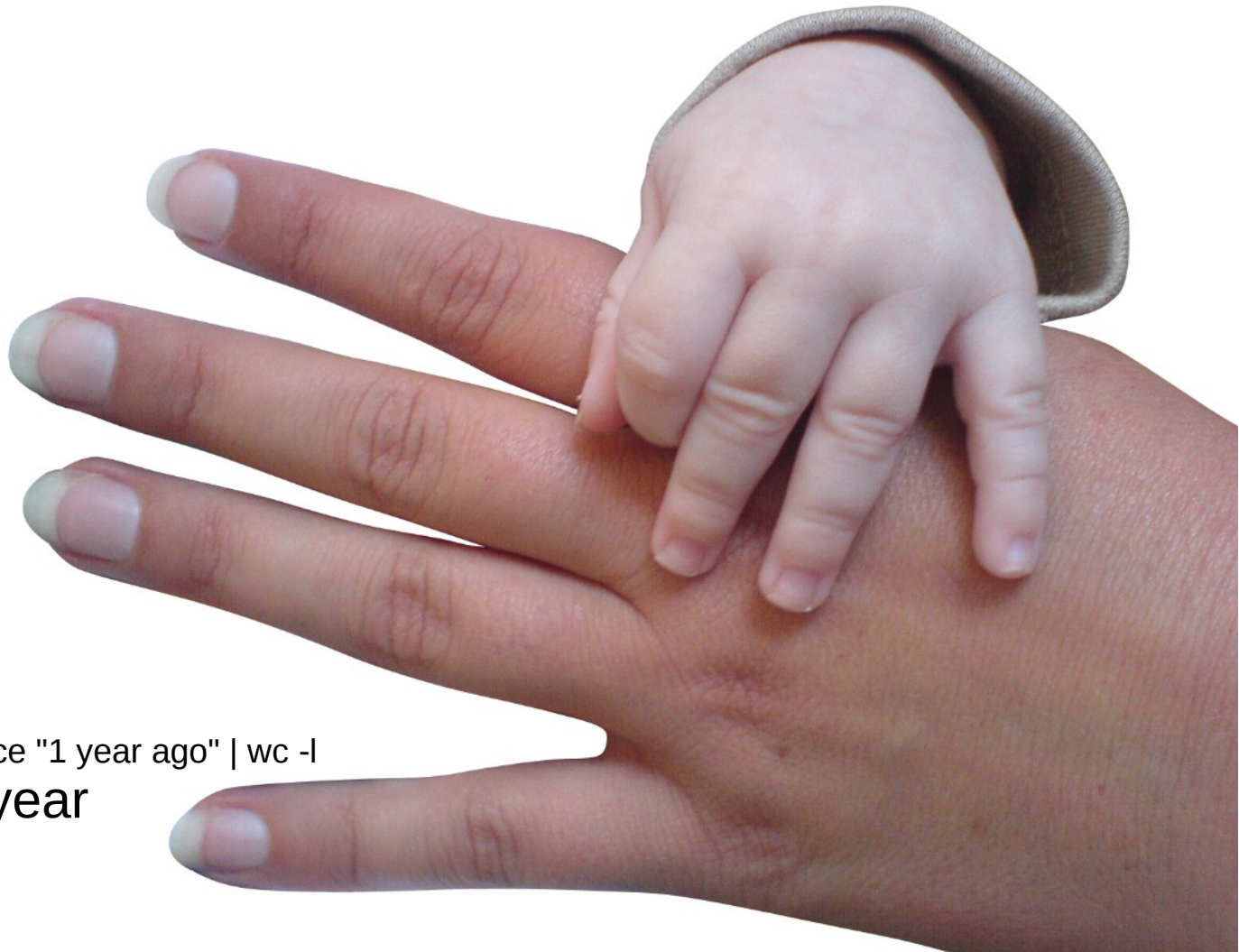
## Committers

Stefan Xenox – Google  
Simon Scholz – vogella GmbH  
Tony McCrary – independent  
Jonas Helmig – EclipseSource  
Dirk Fauth – Bosch  
Sergey Prigogin – Google  
Andrew Loskutov – independent

## Contributors

```
git shortlog -s --pretty=format:"%an" --since "1 year ago" | wc -l
```

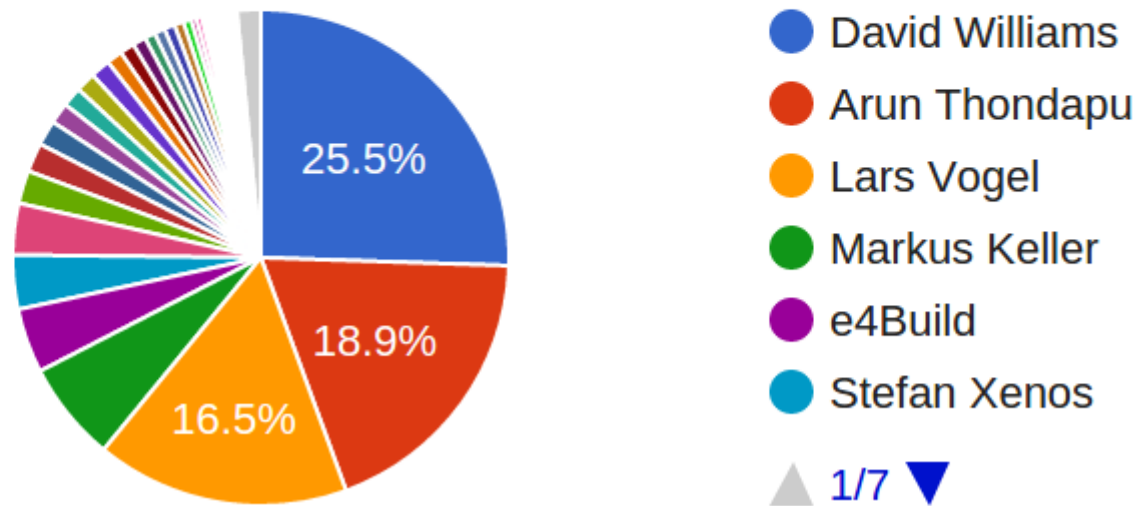
84 contributors in the last year



# Total platform work including release engineering

## Individual Contribution Activity:

Commits on this project by individuals over the last three months.





# eclipse.platform.text will be integrated into eclipse.platform.ui

## Platform Text

Overview

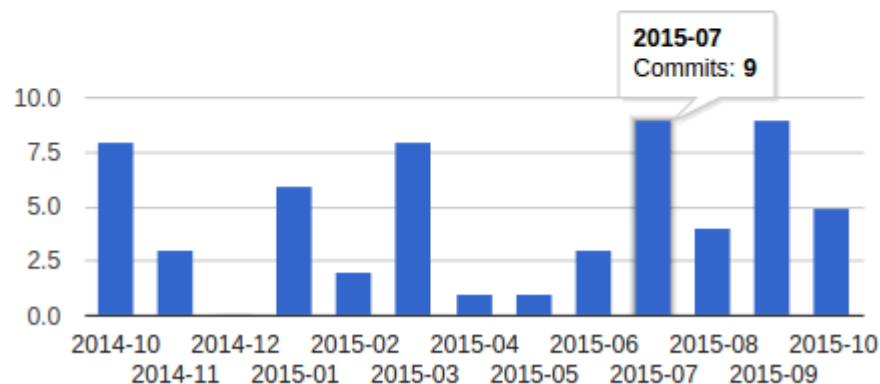
Downloads

Who's Involved

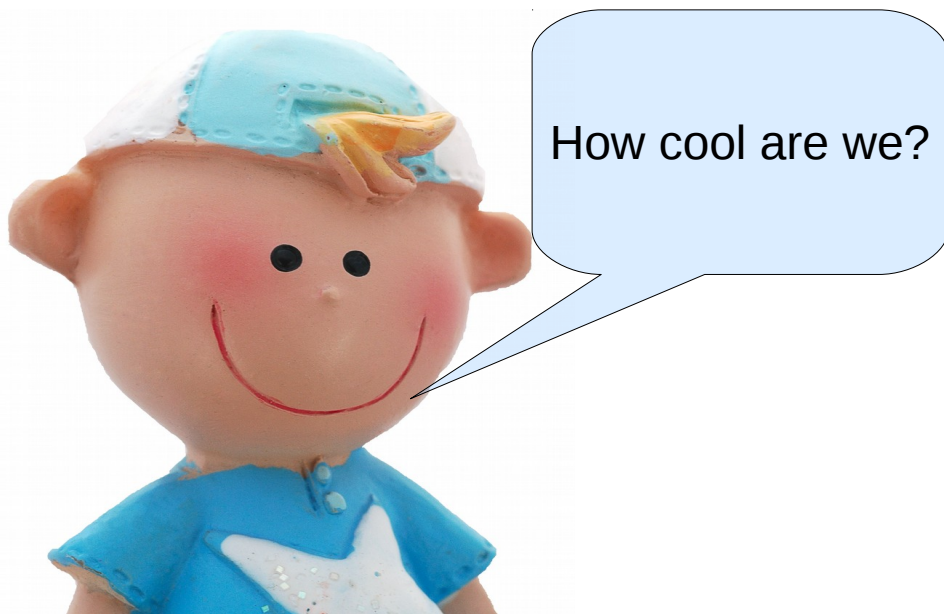
Developer Resources

### Contribution Activity:

Commits on this project (last 12 months).



# In Eclipse Neon platform moves to Java 8



# A big code clean

## **Simplified API**

**Remove dead internal code**

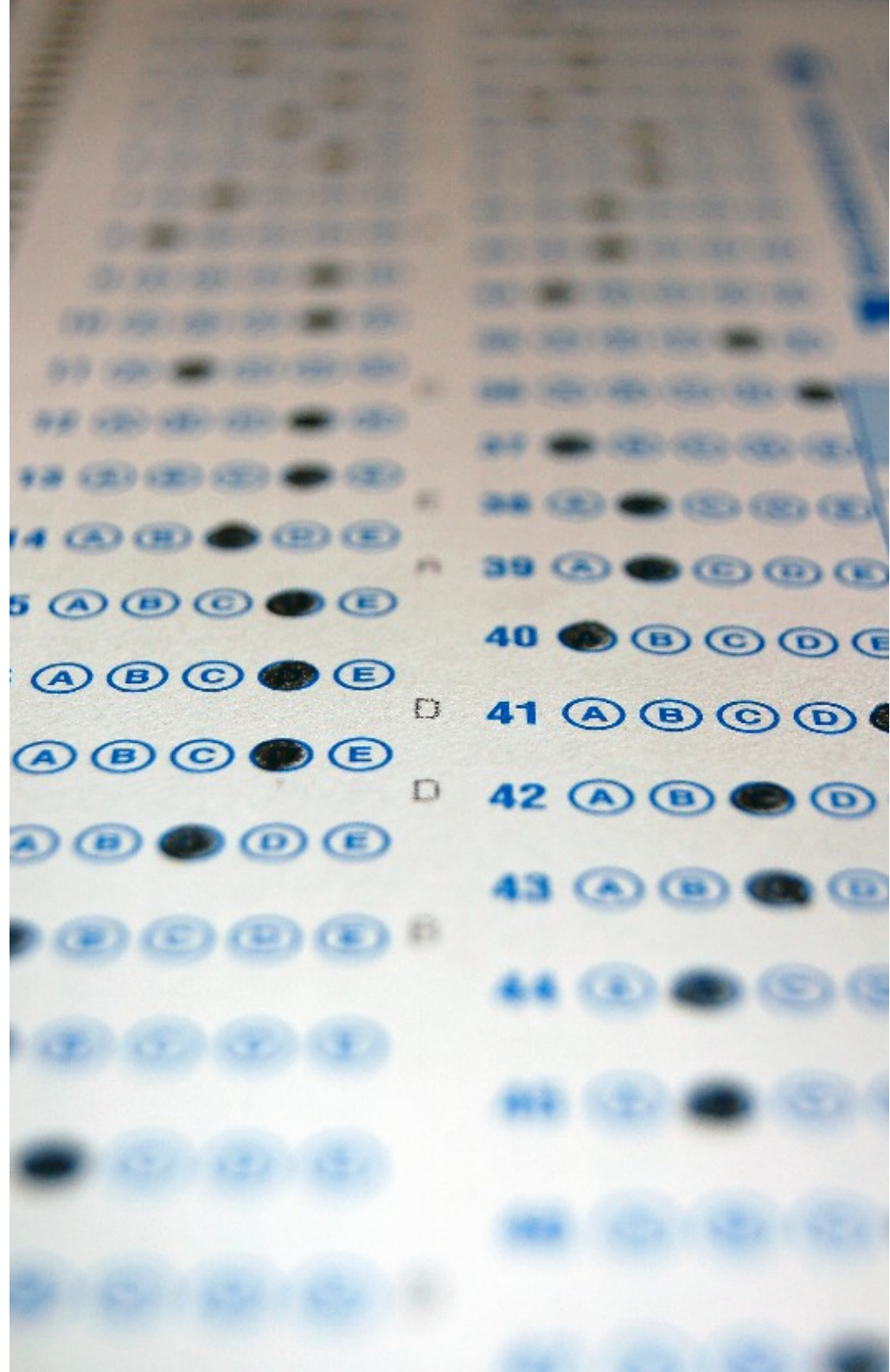
**Remove Eclipse 2.0 compatibility layer**

**Use annotations**

**Update of all plug-in to relevant Java versions (Java 7 or Java 8)**

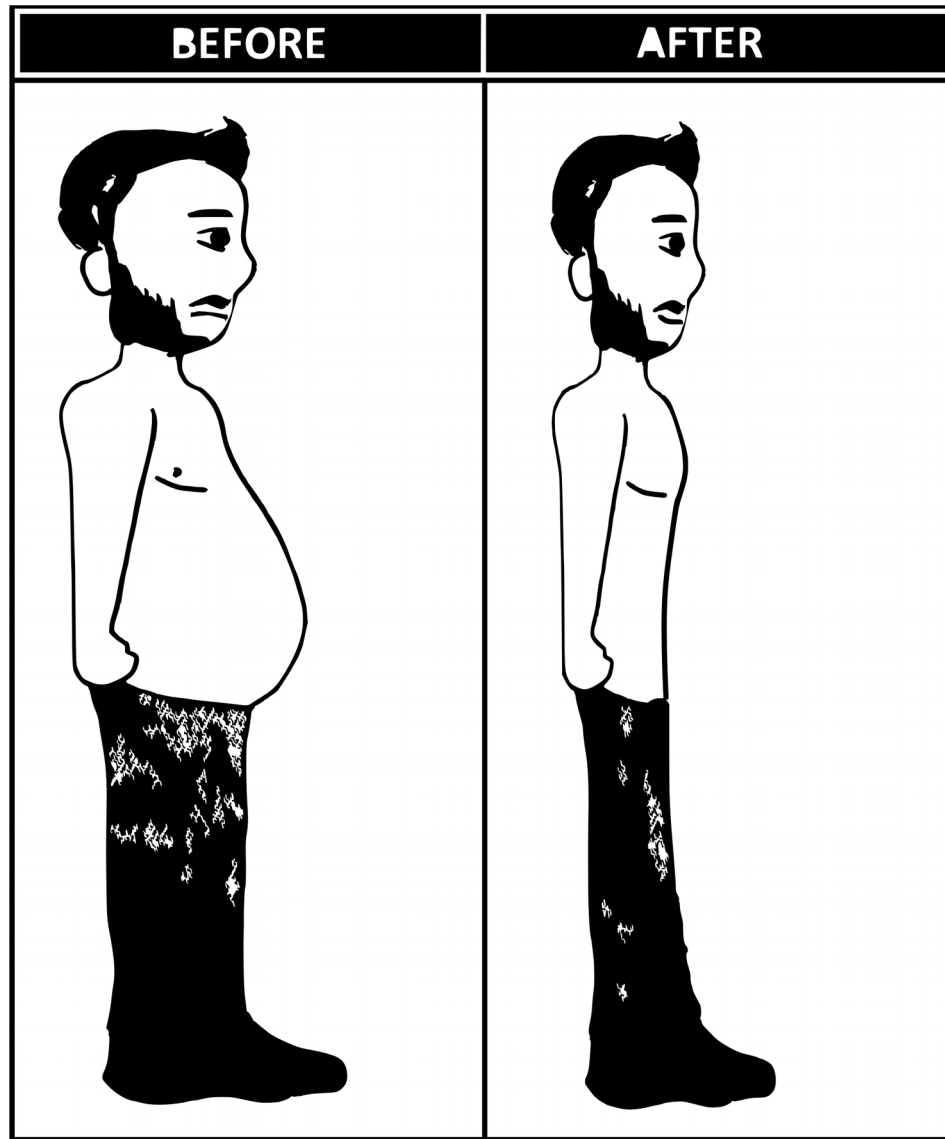
**Usage of Java 8 lambdas**

**Update of the tests (partial to Junit 4)**





# How does a code cleanup help?



Generics in JFace Databinding

Convert platform tests to  
JUnit 4

Deprecated outdated API

Remove  
deprecated API usage

Fix warning messages

Delete outdated examples

Making our tests run in the Gerrit build validation

Remove unused internal methods

Simplified API for getting an adapter

Delete unnecessary whitespace

Stuff we do for our  
users in  
Eclipse 4.6 (Neon)

SWT

**Finally make GTK3 as  
good as GTK2**



# Word-Wrap in text editors should see the light



```
1+ import java.io.IOException;
8
9
10
11 public class RetrofitClient {
12
13     public Response<List<Item>> callServer()
14     {
15         Retrofit retrofit = new
16         Retrofit.Builder().baseUrl("http://
localhost:9000/")
.addConverterFactory
(GsonConverterFactory.create()).build();
```

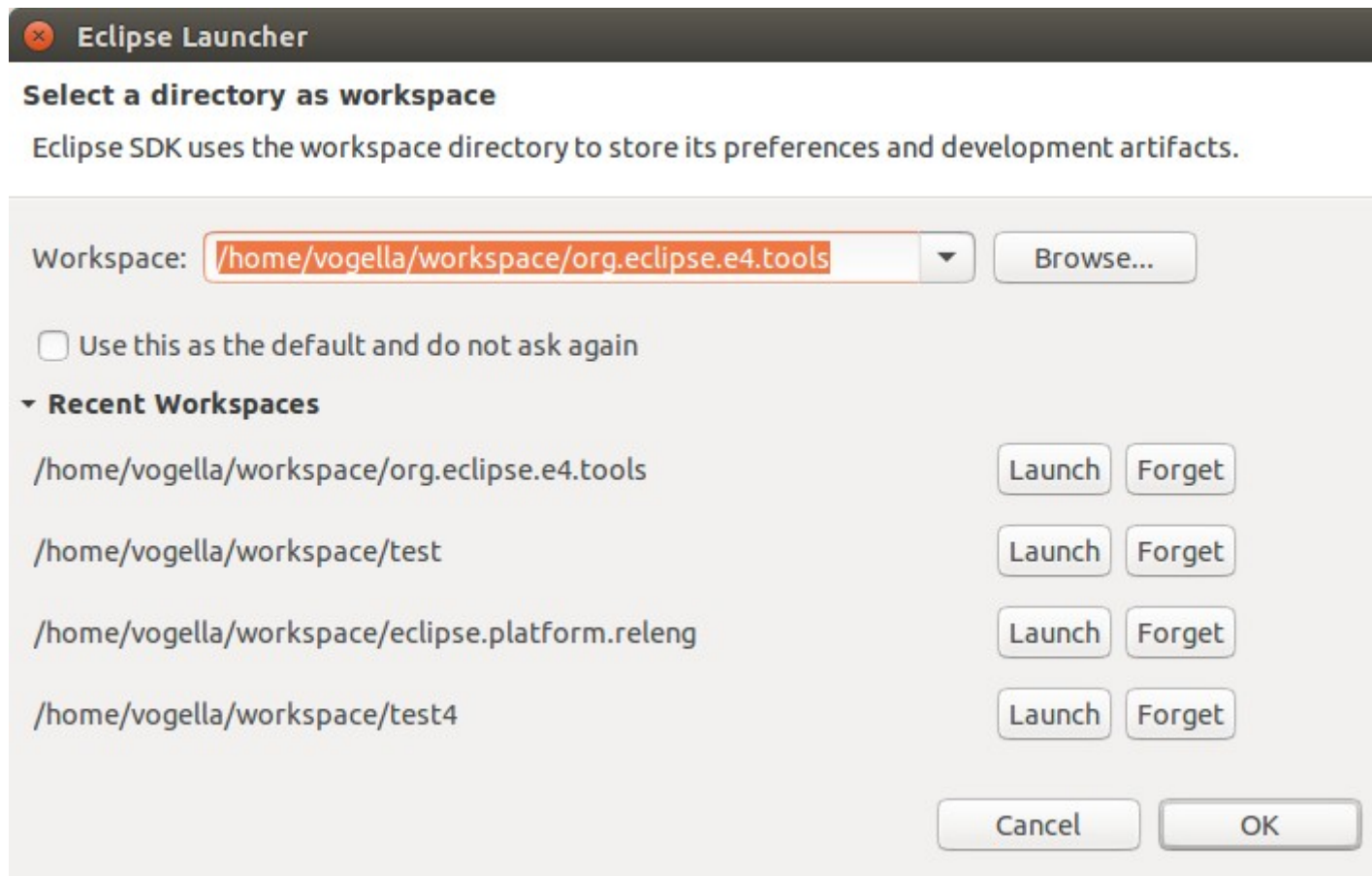
Most voted feature request these days



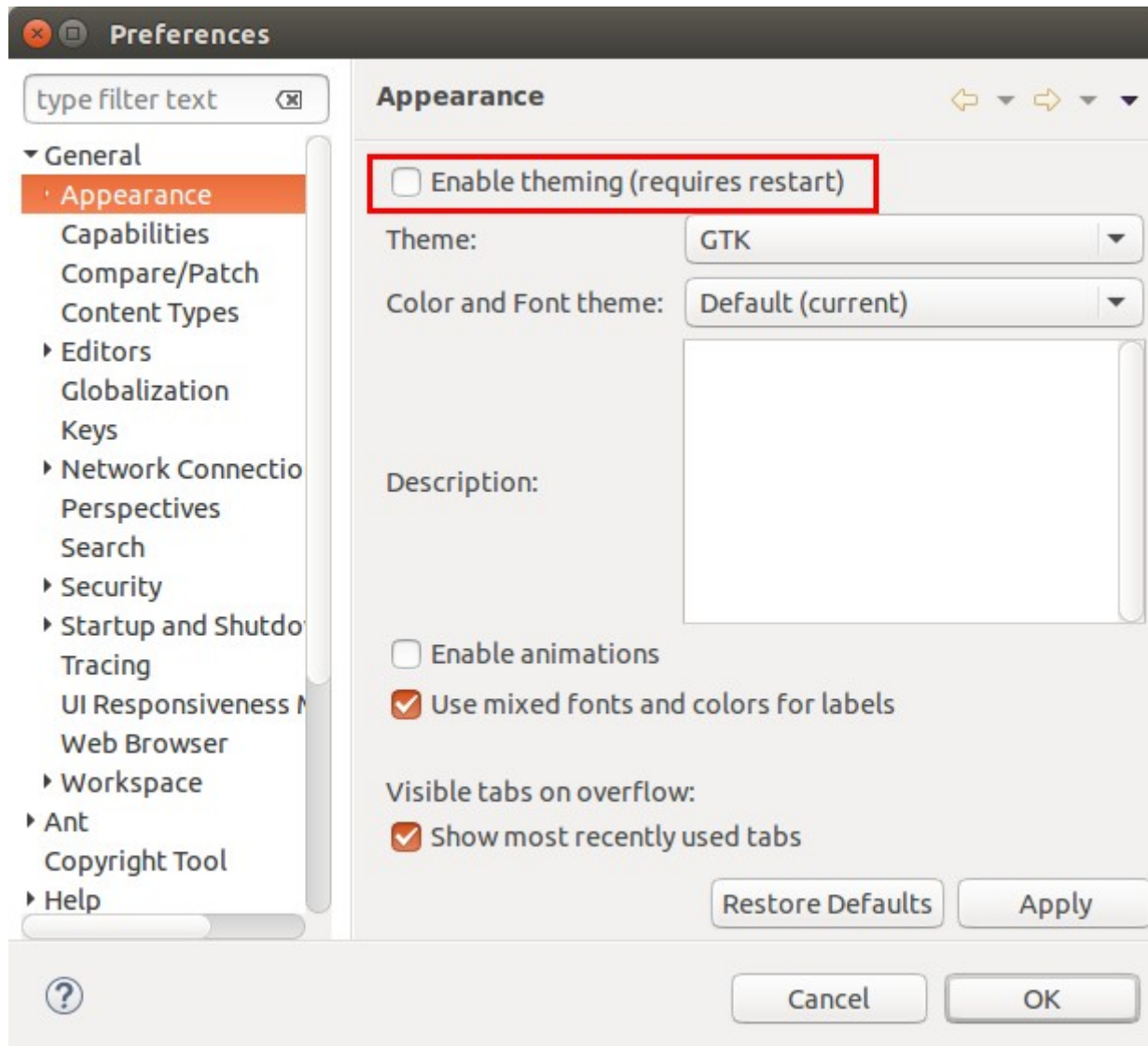
# Shortcuts for de/increasing the text editor font size

Available for Mars via the saneclipse plug-in:  
[saneclipse.vogella.com](http://saneclipse.vogella.com)

# Eclipse launcher

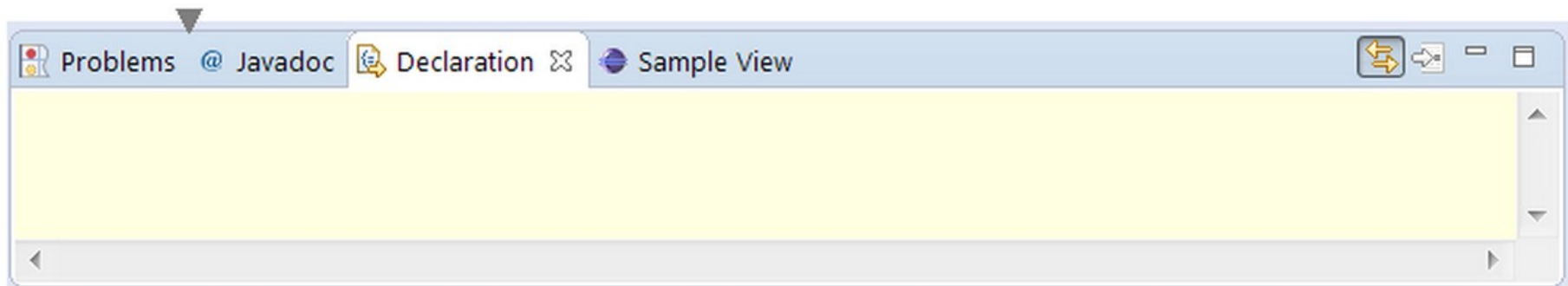


# Faster Eclipse without Styling

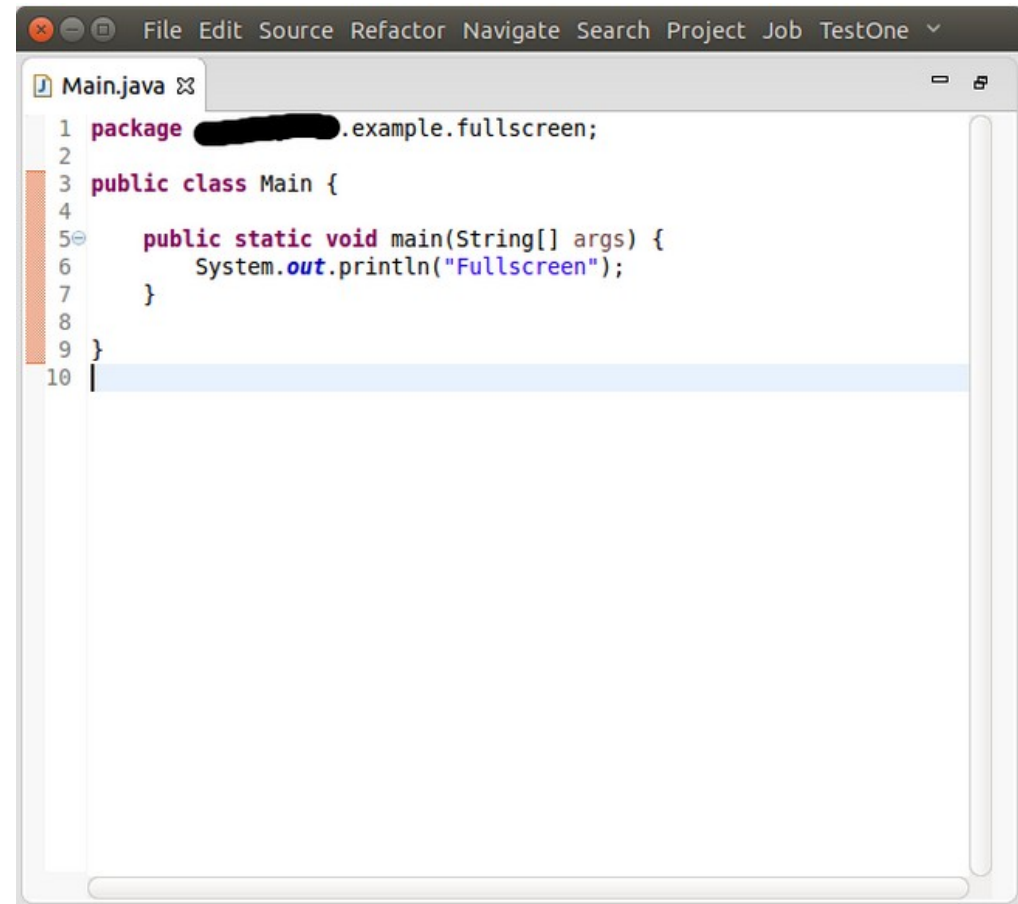
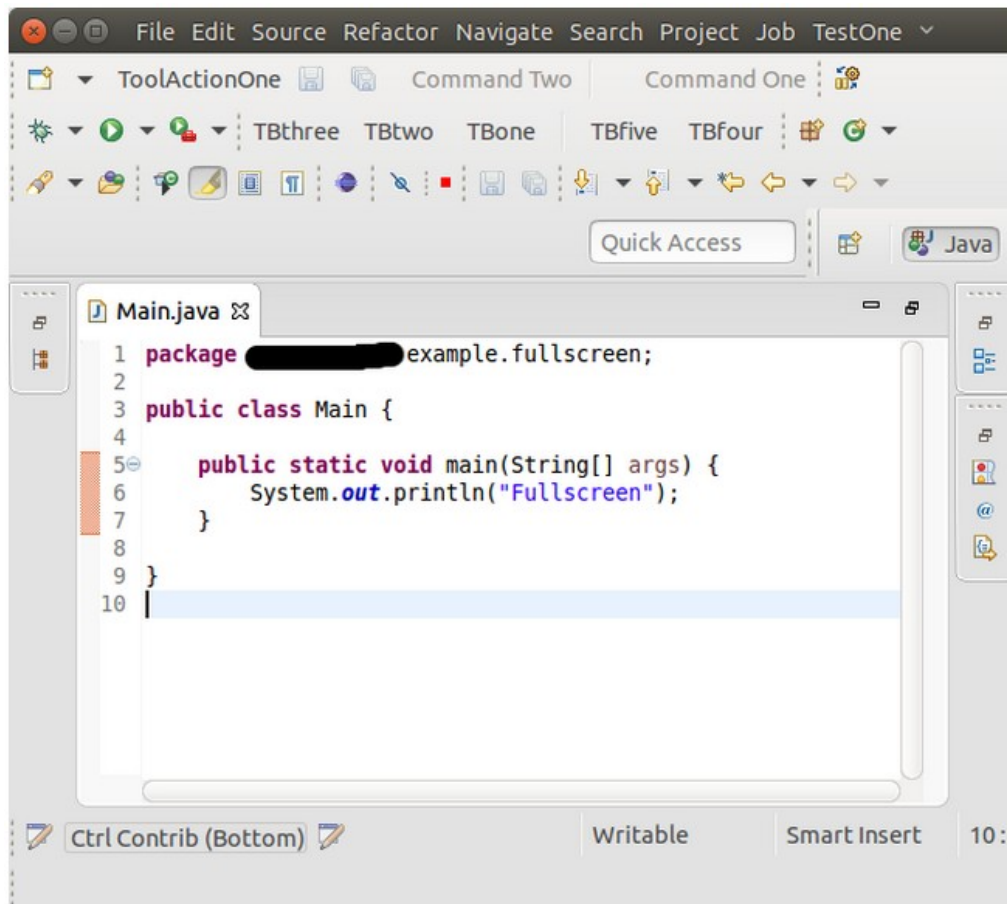




# Better DnD feedback for views and editors



# Ability to hide the toolbars of the main window



Available for Mars via the sanecclipse plug-in: [sanecclipse.vogella.com](http://sanecclipse.vogella.com)

# Faster Eclipse

## Background jobs with SubMonitor

Using the existing APIs:

SubProgressTest#testTypicalUsage elapsed time: **3.576s**

SubProgressTest#testCreateTree elapsed time: **2.422s**

With the new APIs:

**NewSubProgressTest#testTypicalUsage elapsed time: 1.988s**

**NewSubProgressTest#testCreateTree elapsed time: 0.839s**

## Jobs can be x-times faster

# Faster, faster Eclipse

Remove unnecessary activators

Avoid hitting the the file system for ImageDescriptors

Solving memory leaks

Avoiding object creation



# Provide a smart import wizard

User does not have to know  
which project type he has to implement,  
Eclipse will figure that out

Open  
unknown text files  
with text editor not system editor

# Moving the IDE more to e4 API

Plans to migrate existing (internal) handler  
Implementations to e4

Allows smooth migration of the IDE internals

PDE plans to support OSGi  
declarative services spec version 2  
(based on annotations)



# Sub-string completion in JDT

(first version merged yesterday into Neon)

```
txtInput = new Text(parent, SWT.BORDER);  
txtInput.setMessage("Enter text to mark part as dirty");
```

```
txtInput.Message
```

```
txtInput.addModi
```

```
@Override
```

```
public void
```

• getMessage() : String - Text

• setMessage(String message) : void - Text

Returns the widget mes  
displayed as a hint for th  
purpose of the field.

Typically this is used in c

# Postfix completion in JDT

(Planned)

<https://github.com/trylimits/Eclipse-Postfix-Code-Completion>

**Potential cool things?**



Maybe Bugzilla feels super old?

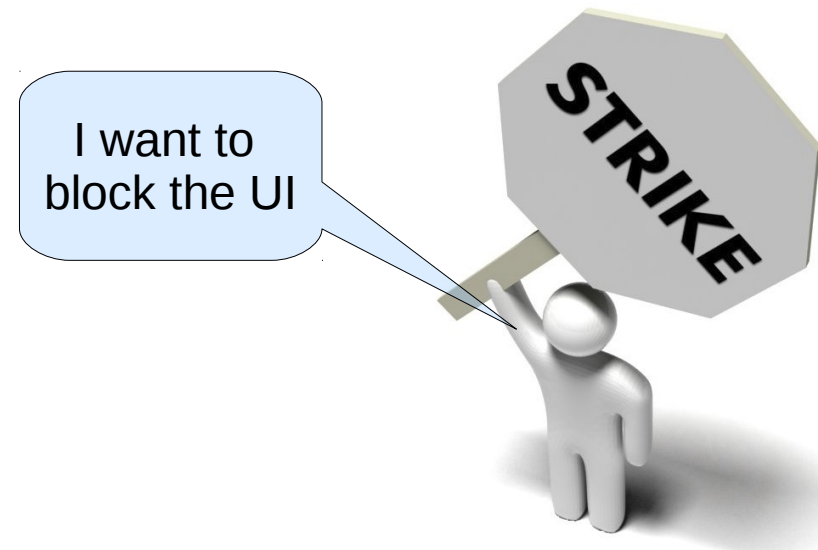
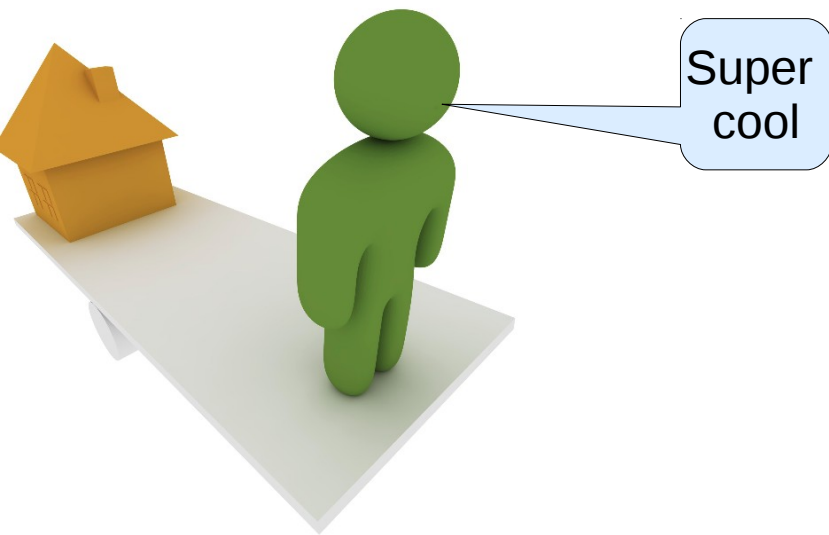
Allow editing of your comments in  
bug reports



All depends on this  
Guy: Denis Roy  
Webmaster at Eclipse

Outline in JDT shows the annotations in your code

# Non blocking asynchronous content assists





# Eclipse roadmap and the Boss



Well-dressed headless chicken

Hey, that is cool  
code. I would like to  
contribute to it.





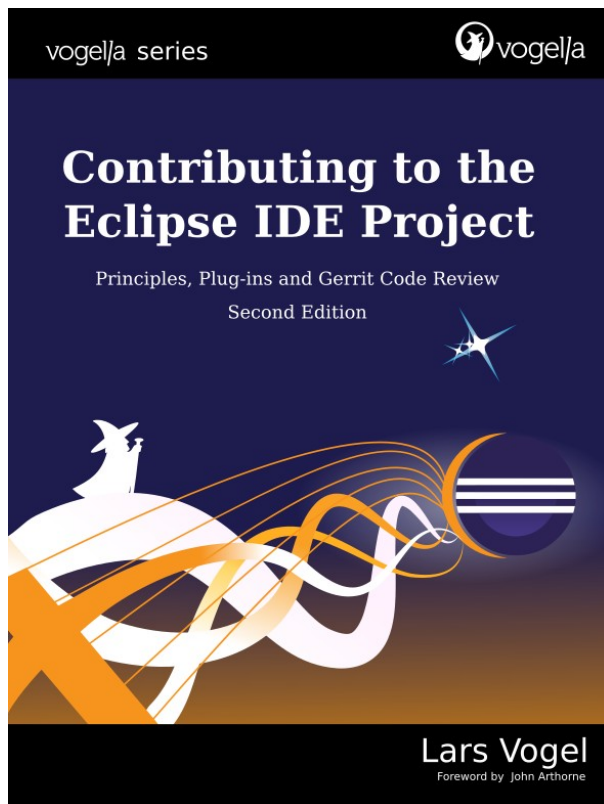
**hr@vogella.com**

**Work as student  
on Eclipse  
OS code**



# Contributing to the Eclipse IDE, Second Edition

<http://www.vogella.com/books/eclipsecontribution.html>



As of today, available as **free download** and paper book





**Questions?**



# Thank you

For further questions:

[lars.vogel@vogella.com](mailto:lars.vogel@vogella.com)

<http://www.vogella.com>



Need commercial support: [sales@vogella.com](mailto:sales@vogella.com)







# eclipsecon Europe

Ludwigsburg, Germany, 3 - 5 November 2015

Evaluate the sessions at [www.eclipsecon.org](http://www.eclipsecon.org)



+1 0 -1