You Are a Scala Contributor

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or you can be, if you want to.

here's how.

you are a Scala contributor

If you open an issue
If you comment on an issue
or a pull request

If you make a pull request. Even for a typo.

modest beginnings



Scala Programming Language / SI-725

typo in error message ("incompatibe")

Reporter:



Seth Tisue

Votes:



Martin Odersky added a comment - 05/Apr/08 7:24

will be fixed in next release.

use your GitHub identity

issues
pull requests
chat
forums

help is available

chat (Gitter):

https://gitter.im/scala/contributors (web or app)

forum (Discourse):

https://contributors.scala-lang.org (web or email)

where to ask?

- 1. chat
- 2. forum
- 3. open a pull request!

half-baked pull requests are okay

You'll get help getting it across the finish line.

where is everything?

what's out there?

our GitHub organizations

scala/*
scalacenter/*
lampepfl/*

main scala/* repos

scala/scala-lang = scala-lang.org
scala/docs.scala-lang = docs.scala-lang.org

scala/scala = compiler, stdlib, spec
scala/bug = no code just bugs
scala/scala-dev = work tracking

scala module repos

scala/scala-xml scala/scala-parser-combinators scala/scala-parallel-collections scala/scala-collection-compat scala/scala-java8-compat scala/scala-swing scala/scala-async scala/scala-continuations

more soon: scala/scala-dev#323

the Scala websites

Scala. Do you know it?

Kind of? Still learning?

new contributors welcome at:

https://github.com/scala/scala-lang

https://github.com/scala/docs.scala-lang

the Scala websites

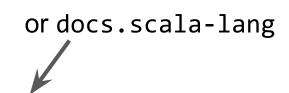
Do you have web skills? Some issues that need those.

Can you put words together? That's needed, too.

Also: translators wanted!

zero to website PR:

easiest: GitHub web UI a little harder:







hub clone scala/scala-lang cd scala-lang bundle install bundle exec jekyll serve --watch edit foo/bar.md

website issues

look for the "good first issue" label

```
website enhancement good first issue help wanted
on good first issue
ement good first issue help wanted
are broken in 2.12.0 bug good first issue
```

Scala modules

modules: contributing

modules are just like other libraries

independent release schedule (can be rapid)

standard tools: sbt, ScalaTest, ScalaCheck, Travis-CI

community-based maintenance (w/ participation from Lightbend & Scala Center)

scala/scala

scala/scala

language specification
Scaladoc
standard library
compiler

scala/scala last month

majority of commits are from outside

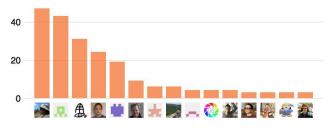
contributors

May 19, 2018 – June 19, 2018

Period: 1 month →



Excluding merges, **33 authors** have pushed **224 commits** to 2.13.x and **228 commits** to all branches. On 2.13.x, **861 files** have changed and there have been **10,387 additions** and **5,193 deletions**.



scala/scala: language specification

Issues: "spec" label in scala/bug

"most wanted": merge in accepted SIPs

separate contributor doc: spec/README.md separate tools: Markdown, Jekyll, MathJax

scala/scala: contributor docs

README.md
CONTRIBUTING.md

scala/scala: Scaladoc (content)

tools: Scaladoc, sbt (light)

zero to Scaladoc PR:

```
hub clone scala/scala
cd scala
edit src/library/scala/Foo.scala
sbt
> library/doc
(view in browser)
```

standard library

scala/scala:

scala/scala: standard library

Run tests using sbt.

existing tests may be partest-based.

new tests should use

JUnit or ScalaCheck

to test performance, see test/benchmarks/README.md

scala/scala: compiler

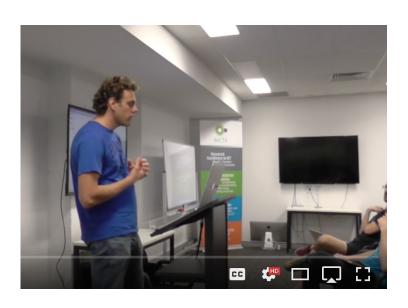
scala/scala: compiler

most tests are partest-based. partest shines here.

test/files/pos, test/files/neg, test/files/run test/files/*/*.check

Travis-CI will run the full test suite for you.

compiler hacking



Jason Zaugg (Scala team) "Scalac Survival Guide"

http://www.youtube.com/watch?v=06oP5IXWveM

compiler hacking

Eugene Burmako's "Scala Hacker Guide"

https://scala-lang.org/contribute/hacker-guide.html

compiler hacking: ramping up

learn phases, get the big picture:
scalac -Xprint:all Foo.scala

compiler hacking: ramping up

set up IntelliJ (src/intellij/README.md)

IntelliJ debugger can attach to a running JVM

hardcore compiler hackers swear by IntelliJ

compiler hacking: ramping up

fix/improve errors & warnings
use the Scala reflection API
write a few macros
write a compiler plugin or two
(see "Compiler Plugins 101")

what about Scala 3?

what about Scala 3?

Scala 2.14 theme: align with Dotty

Scala 2.14 and Scala 3 will share:

- standard library
- compiler back end
- library ecosystem, via Tasty
 - much else

work on Scala 2.14 *is* work on Scala 3

what about Scala 3?

code:

https://github.com/lampepfl/dotty

discussions:

https://github.com/lampepfl/dotty/issues

chat:

https://gitter.im/lampepfl/dotty

specific suggestions

please help improve "A Tour of Scala"

https://docs.scala-lang.org/tour/tour-of-scala.html

please help triage bugs in scala/bug

We have too many old tickets and too many new ones.

Is it clear and actionable?
Is it still reproducible in Scala 2.13.0-M4?
Is it appropriately labeled?
Is it a "good first issue"?

Bug triage is needed and valued.

please help review PRs in scala/scala

Not for core maintainers only!

PR review includes asking questions. It isn't just thumbs up/down.

PR review is usually about improving PR quality.

If you don't understand the code, consider: testing; documentation; clarity; performance; Is the change justified?

please help the ecosystem move to sbt 1

many projects have upgraded quite a few have not

please help the ecosystem move to Scala 2.13.0-M4

every library needs help with this right now

help your favorite library help their upstream dependencies

please help test and polish 2.13 collections

report issues you find when upgrading libraries and personal projects to M4

fix issues being reported, they are usually manageable in difficulty

general thoughts

start small

scratch your own itch

get ideas from Gitter, Stack Overflow, ...

how long is the release cycle?

assess your personal capacity for delayed gratification

seek especially welcoming and responsive maintainers and communities

look for "good first issue" labels
look for a contributor's guide
ask a question in chat, try a modest sample PR
(request feedback)

staying motivated

staying motivated

Expect delays. Expect some failures.

Pursue multiple pull requests at once. Write everything down.

redefine failure as progress

Give up? Tell others what you saw. Describe where you got stuck.

This is contributing, too.

Someone else may pick it up. It happens all the time.

redefine failure as progress

In the end, your PR didn't make it?

You learned something.

And the PR stands as documentation of a path not taken.

This is contributing, too.

staying motivated

Seek online collaborators. Help others as soon as you are able.

Seek local collaborators.

Scala Open Source Sprees

organized by the Scala Center / follow @scala_lang









