



Learning by contributing to Open-Source Software

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<https://github.com/pharo-project/pharo>



z. zidane

Practiced
football? Yes



z. zidane



r. federer

Practiced
tennis? Yes



r. federer



k. buniatishvili

Practiced
Piano? Yes



k. buniatishvili

Did you see the
pattern?

**How to practice
software skills?**

How to practice software skills?

- Program (but how to get feedback) - code review are precious but difficult to get
- Code katas (always fun)
- Participate to sprints - Pair program
- **Participate to open-source**

But I'm a noob



**And the world is
complex**



We are all noobs!



**The solution is just
some clicks away...**

**Take any opportunity
to read code**

**Take any opportunity
to contribute**

A PIECE OF CAKE

**Contributing is easy &
simple**



Possible contributions

- Read/answer newbie questions
- Participate to the wiki
- Review bug entry description
- Review bug fixes
- Write tests for bug entries
- Improve test coverage
- Improve comments

Newbie Questions

- I learned a lot answering them :)
- When I did not know I looked for the answers
- Try and learn

Read discord

The screenshot shows a Discord chat window for the #exercism channel. The interface is dark-themed. On the left is a sidebar with a list of channels under categories: 'FOR NEW USERS' (welcome, mooc, tutorial-help, video-tutorials, exercism), 'PHARO' (news, general, development, offtopic, iceberg, bootstrap, vm, research, spec), and 'LIBRARIES' (databases, seaside). The main chat area shows a conversation. A user named 'roelof' has sent two messages. The first message says 'Oke, I see the symmertics but do not see the way I can calculate the spaces'. The second message says 'still not right:' followed by a code block containing Haskell code for formatting spaces in a list. Below the code block is a thinking face emoji. At the bottom of the chat area, a 'NEW MESSAGES' separator is visible, followed by a message from 'BenComan' asking 'Can you show what you do get?'. On the right side of the chat area is a list of users. Under 'ADMIN—5', there are five users: Alexandre Bergel, astares, BenComan, Esteban Lorenzano, and Serge Stinckwich. Under 'ONLINE—97', there are several users including [MT]fire (Playing Garry's Mod), Aliaksei Syrel, Allex Oliveira, Atsa, Bence.Fabian, Benoit Verhaeghe, benravin, Bill Dargel, and hitmanner.

Pharo

exercism building out a portfolio for ht... Search

FOR NEW USERS

- # welcome
- # mooc
- # tutorial-help
- # video-tutorials
- # exercism

PHARO

- # news
- # general
- # development
- # offtopic
- # iceberg
- # bootstrap
- # vm
- # research
- # spec

LIBRARIES

- # databases
- # seaside

@tmackinnon

roelof Today at 11:14 AM

Oke, I see the symmertics but do not see the way I can calculate the spaces

roelof Today at 1:21 PM

still not right:"

```
makeRow: aChar
  | half outspaces innerspaces |
  outspaces := aChar asInteger -
  $A asInteger + 1.
  innerspaces := aChar asInteger -
  $A asInteger - outspaces + 1.
  half := String
    streamContents: [ :stream |
      stream
        nextPutAll: (self
          displaySpaces: outspaces);
        nextPut: aChar;
        nextPutAll: (self
          displaySpaces: innerspaces) ].
  ^ half , half allButLast reversed
```

NEW MESSAGES

BenComan Today at 1:58 PM

Can you show what you do get?

ADMIN—5

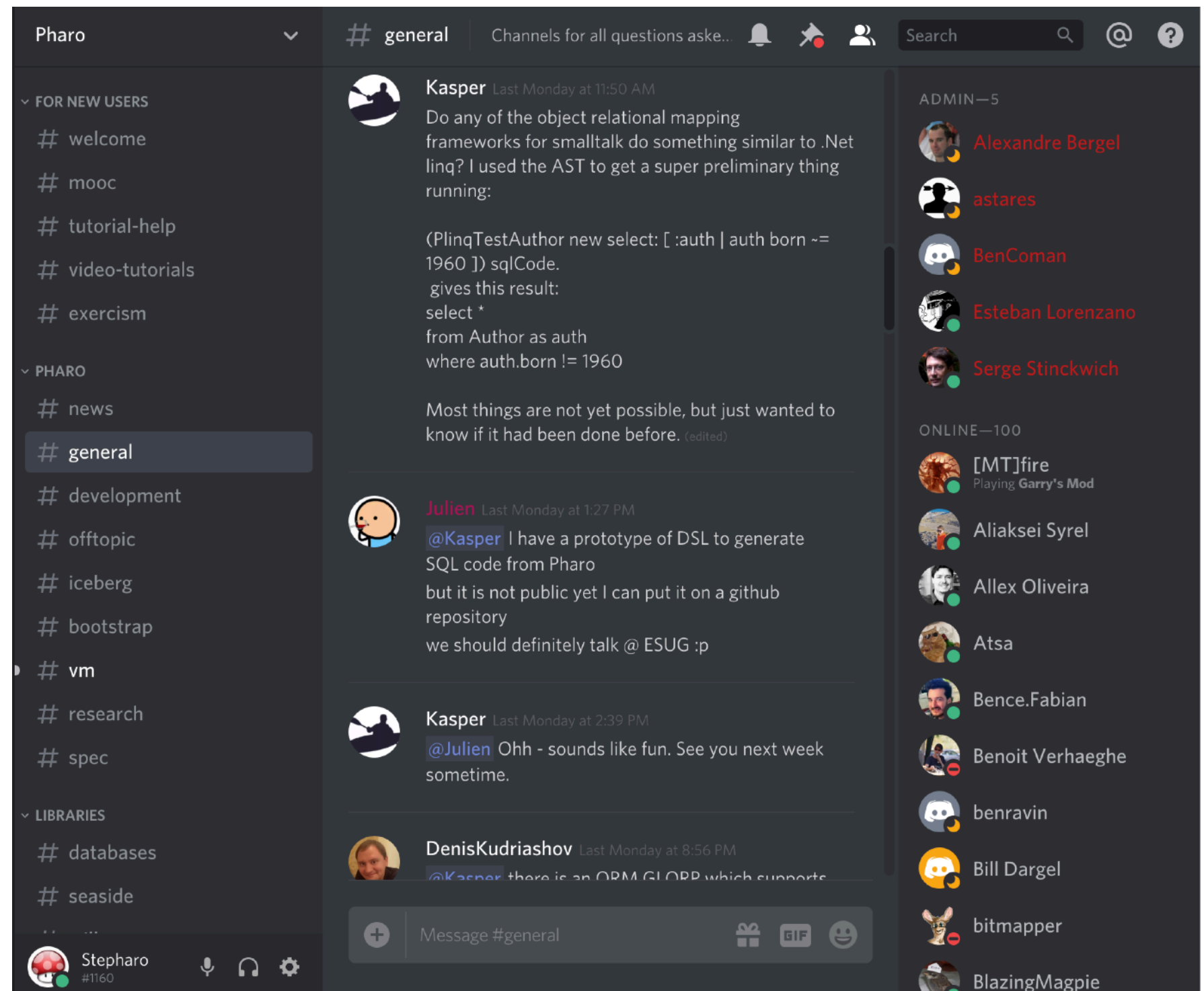
- Alexandre Bergel
- astares
- BenComan
- Esteban Lorenzano
- Serge Stinckwich

ONLINE—97

- [MT]fire
Playing Garry's Mod
- Aliaksei Syrel
- Allex Oliveira
- Atsa
- Bence.Fabian
- Benoit Verhaeghe
- benravin
- Bill Dargel
- hitmanner

Answer questions

- On discord
- Mailing-list



**Take any opportunity
to contribute**

**[how did we meet
with Marcus D.?]**

**[we reviewed squeak
bug issues]**

Bug issue contribution

- Can you understand it?
 - else ask for precision
- Can you repeat the problem mentioned?
 - report it. This is a valuable information

Bug issue contribution

- Write a test to show the problem?
- If the contributor provides a test, is it sounds?

Join/read bug issue discussion



dalehenrich commented 19 days ago

Author + 😊 ...

Once you get past the missing tab message you aren't completely out of the woods. If you want the STON output to be correctly display on stdout (on Ubuntu 16.04) you have to arrange for STONWriter to use `String lf`, instead of the default `String cr` --- if you don't, the output is pretty much scrambled ...



dalehenrich referenced this issue 19 days ago

(Pharo 7.0.3) StdioStream>>peek (on stdin) returns a byte instead of a character #4173

Closed



dalehenrich commented 19 days ago

Author + 😊 ...

FWIW, this implementation satisfies my needs:

```
tab
    ^ self nextPutAll: String tab
```



akgrant43 commented 18 days ago

Collaborator + 😊 ...

As with #4173, take a look at wrapping stdout with a `ZnCharacterWriteStream` and `ZnNewLineWriterStream`.



dalehenrich commented 18 days ago

Author + 😊 ...

@akgrant43 thanks a lot

None yet

Milestone

No milestone

Notifications [Customize](#)

Unsubscribe

You're receiving notifications because you're watching this repository.

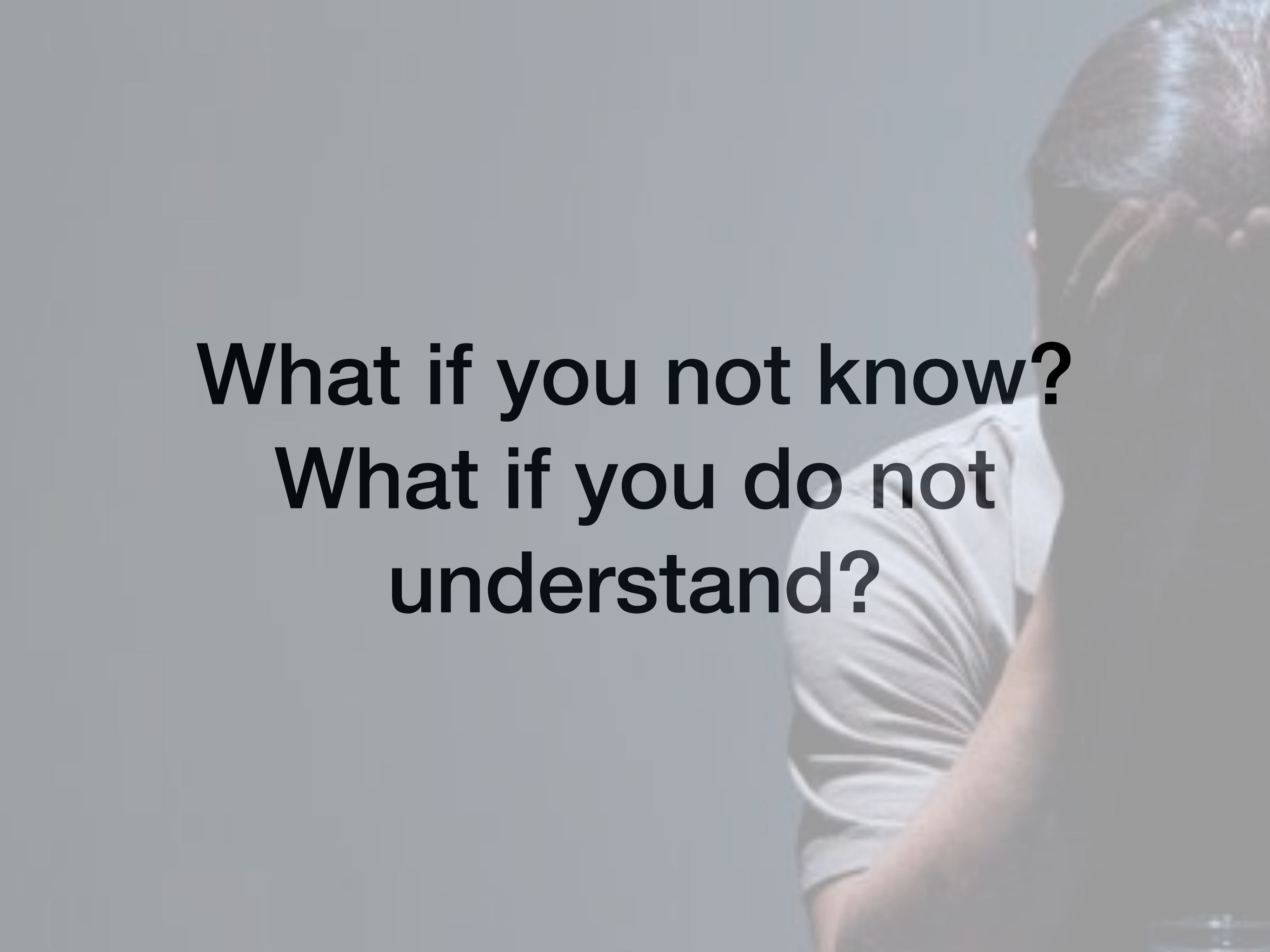
2 participants



Lock conversation

Pin issue

Transfer issue

A person with dark hair, wearing a white short-sleeved shirt, is shown from the side. They have their right hand pressed against their forehead, suggesting a state of stress, confusion, or frustration. The background is a plain, light-colored wall.

**What if you not know?
What if you do not
understand?**

**Easy! Drop it and pick
the next one**

Read tests to learn

- Tests are cool to learn
- Tests can be improved, so you can improve them

Improve test coverage

- It is often easier to write tests than the code :)
- Grab an object and inspect it
- Turn this in a test

Add executable comments

```
allRangesOfSubstring: aSubstring
    "'Ab cd ef Ab cd' allRangesOfSubstring: 'cd' >>> {(4 to: 5). (13 to: 14)}"
    "'Ab cd ef Ab cd' allRangesOfSubstring: 'zz' >>> #()"

^ Array streamContents: [:s | | start subSize |
    start := 1.
    subSize := aSubstring size.
    [start isZero]
        whileFalse: [ start := self findString: aSubstring startingAt: start.
            start > 0
                ifTrue: [s nextPut: (start to: start + subSize - 1).
                    start := start + subSize]]]
```

[Free side effect]



When you contribute to open-source you improve
your visibility

[Remember]

Every thing you do today has an impact
on your tomorrow!

[Personal note]

- My objective is to read (and understand) all Pharo source code :)
- So I take any opportunity to read code
- I even read closed issues

**Do not miss a great
opportunity to grow your
knowledge**

Join and invent the future

