

Ruby trunk - Feature #14763

Allow more Enumerable methods to accept method names as symbol arguments

05/16/2018 02:02 AM - sunnyruneja (Sunny Juneja)

Status: Closed	
Priority: Normal	
Assignee:	
Target version:	
Description	
Enumerable has a short hand which accepts method names as symbols.	
<pre>(5..10).reduce(:+) ==> 45</pre>	
I'm proposing we allow the same functionality for #any?, #all?, #find, #reject, #select, #one?, #find_index. I'm requesting this because when I did this earlier today and it did not meet my expectations:	
<pre>[2,4,6].all?(:even?) ==> false</pre>	
<ul style="list-style-type: none">• Any risk of incompatibility? I don't believe so. As of now, #any? accepts an argument and compares using ==. The following is current behavior:	
<pre>[Symbol].any?(:even?) ==> false [:symbol].any?(:even?) ==> false [].all?(:even?) ==> true</pre>	
Thanks for consideration of this request. I've used Ruby for 6 years and this is my first feature request. I understand if it is not a high priority or interesting to the maintainers. I am happy to try to add an implementation if it is interesting.	

History

#1 - 05/16/2018 03:15 AM - shevegen (Robert A. Heiler)

Is there any reason why you did use ":even?" rather than "even"?

```
[2,4,6].all?(even)
```

To me symbols with a question mark seem somewhat unusual or rare.

However had, my question is mostly a small detail, in my opinion, not the bigger picture. I understand the intent of the code e. g. query ruby for all even/odd numbers, through the use of a Symbol.

I am mostly neutral on the proposal itself and slightly in favour, primarily because I like symbols and I think there is no problem with it. It should, if accepted, be documented somewhere though.

My suggestion would be to have matz decide on it soon, simply so that you can know whether matz is in favour or against it.

I would not worry about the priority - there have been lots of cases where low priority issues have been added/implemented.

If you would like to, you could add your issue at:

<https://bugs.ruby-lang.org/issues/14698>

And someone can mention it for discussion at the developer meeting. That is one of the best ways to ask matz directly. :)

(I myself won't suggest your issue request because I think that it is your suggestion, so you should be in full control over as to whether you want to have

it discussed or not, not me.)

By the way, there have been proposals accepted that re-use Symbols meaning.

<https://github.com/ruby/ruby/blob/trunk/NEWS>

See the various Kernel.# methods that use :exception.

I think there is nothing wrong with such special meanings; just that it should be documented, so that ruby hackers can know what to use.

#2 - 05/16/2018 04:05 AM - sunnyrjuneja (Sunny Juneja)

Hey Shevegen,

Thank you for your comments. I really appreciate them! I'll respond inline:

shevegen (Robert A. Heiler) wrote:

Is there any reason why you did use ":even?" rather than ":even"?

```
[2, 4, 6].all?(:even)
```

The only reason I used :even? rather than :even is because Integer has a method called even?. In this case, my example is a shorthand for

```
[2, 4, 6].all? { |x| x.even? }
```

I just wanted to show an example with a real method.

I am mostly neutral on the proposal itself and slightly in favour, primarily because I like symbols and I think there is no problem with it. It should, if accepted, be documented somewhere though.

That's a very good point. I forgot to mention it in my original proposal but I wanted to document in the same way inject does. See: <http://ruby-doc.org/core-2.5.1/Enumerable.html#method-i-inject>

It reads:

```
inject(sym) -> obj
# Sum some numbers
(5..10).reduce(:+)
```

If you would like to, you could add your issue at:

<https://bugs.ruby-lang.org/issues/14698>

Thank you! I had no such idea of such a meeting. I will add it to the issue now.

#3 - 05/16/2018 04:39 AM - sawa (Tsuyoshi Sawada)

I think reduce or inject taking a method name as an argument was convenient in the old days when symbol to proc was not available. Today, this feature of reduce and inject does not have the significance it used to have, and should rather be removed because you can just add an ampersand in front of the method name.

Why can't you just add an ampersand in front of the method name? It is not of a big deal.

#4 - 05/16/2018 04:41 AM - sunnyrjuneja (Sunny Juneja)

sawa (Tsuyoshi Sawada) wrote:

I think reduce or inject taking a method name as an argument was convenient in the old days when symbol to proc was not available. Today, you can just add an ampersand in front of the method name.

Why can't you just add an ampersand in front of the method name? It is not of a big deal.

This did not occur to me. Thanks for the reminder. I am happy to remove my request but I am unable to close the issue.

#5 - 05/16/2018 07:49 AM - nobu (Nobuyoshi Nakada)

I think that this is not acceptable due to the backward compatibility.

[2].all?(:even?) returns false now, but it would be true if this is introduced.

The behavior changes from === to send by the argument class, it doesn't seem very predictable when the argument is not a literal expression.

#6 - 06/04/2018 06:49 AM - ujihisa (Tatsuhiko Ujihisa)

- *Status changed from Open to Closed*

closing this on behalf of sunnyrjuneja