Ruby - Feature #10343

Postfix notations for `when` and `else` inside `case` statement

10/08/2014 04:42 PM - sawa (Tsuyoshi Sawada)

Status:	Rejected
Priority:	Normal
Assignee:	
Target version:	

Description

In a case statement, the condition part (when ...) in the branches do not have the same length in general, and especially, else is much shorter than the conditions. So when we write the condition and the return value in a single line, they are not aligned, and are hard to read.

```
case foo
  when some_very_long_proc then "a"
  when short_regex then "bbb"
  when some_long_regex then "cc"
  else "dddd"
end
```

I propose to allow postfix notations with when and else (or otherwise) inside case statement as below:

```
case foo
  "a" when some_very_long_proc
  "bbb" when short_regex
  "cc" when some_long_regex
  "dddd" else
end
```

Pros are:

1. Postfix notation does not require then or ;, so it is concise.

2. The return values from the branches (e.g., "a", "bb", "ccc", "dddd") tend to be shorter and more uniformly lengthened than the conditions, hence they are somewhat close to being aligned naturally, making this easier to read.

3. We are usually more interested in the return value than the condition of a branch, especially when we are reading someone's code and are trying to grasp what the case statement does or returns.

4. This notation is closer to case-like conditional notations regularly used in mathematics:

   ```
        ⌈ 1            (x = 0)
   x! = ⊣
        ⌊ x (x − 1)! (otherwise)
   ```

   So it would be easier to read for those who are familiar with mathematics.

History

#1 - 10/08/2014 05:25 PM - gogotanaka (Kazuki Tanaka)

I'm not sure how we can implement this.. but it looks not bad for me.

What I afraid of most is ..being able to parse this syntax well?

Aside from that, we can achieve what you want for now.

```
case foo
when some_very_long_condition then "a"
when short_cond               then "bb"
when some_long_condition      then "ccc"
else                               "dddd"
end
```

I have to admire this looks little bit ugly : (

Thank you.

#2 - 12/04/2022 08:40 PM - sawa (Tsuyoshi Sawada)

- Description updated

#3 - 12/04/2022 08:55 PM - sawa (Tsuyoshi Sawada)

- Description updated

#4 - 12/04/2022 08:57 PM - sawa (Tsuyoshi Sawada)

After eight years, I still think this would be a good feature. Any opinions?

#5 - 01/17/2023 05:26 PM - sawa (Tsuyoshi Sawada)

- Description updated

#6 - 02/10/2023 06:27 PM - sawa (Tsuyoshi Sawada)

- Description updated

#7 - 02/11/2023 06:43 AM - rubyFeedback (robert heiler)

I do not necessarily have any opinion in favour, but neither
in disfavour. Kazuki's old comment probably refers primarily
to syntax-wise how the "when" do not align, so on that note
aligned "when" would look prettier. Actually the trailing
"else" is the most confusing part to me; the "when" does not
seem that awkward, even though it is a bit.

It may be interesting to ask matz's opinion nonetheless either
way - if he were to start ruby from scratch, would he opt for
such a syntax; after all we have had other additions such as
endless method definitions or pattern matching. :)

(I for one would love to see case/when become a more "first-class
citizen" feature, where we could query its internal state at all
times, or use different case/when to be combined, a bit like
treating them as objects with specific state and behaviour - but
I guess I should add a new request rather than repurpose
Tsuyoshi's issue here.)

#8 - 03/10/2023 01:16 AM - mame (Yusuke Endoh)

- Status changed from Open to Rejected

Discussed at the dev meeting. @matz (Yukihiro Matsumoto) rejected this proposal because he didn't think it was easy to understand.