Ruby master - Bug #6680
Unclear rdoc for Array and String slicing
07/01/2012 07:27 AM - stomar (Marcus Stollsteimer)

<table>
<thead>
<tr>
<th>Status:</th>
<th>Closed</th>
</tr>
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<tbody>
<tr>
<td>Priority:</td>
<td>Normal</td>
</tr>
<tr>
<td>Assignee:</td>
<td>drbrain (Eric Hodel)</td>
</tr>
<tr>
<td>Target version:</td>
<td>2.0.0</td>
</tr>
<tr>
<td>ruby -v:</td>
<td>ruby 1.9.3p243 (2012-06-28 revision 36244) [i686-linux]</td>
</tr>
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</table>

Description

=begin
Slicing of arrays and strings specifying start/length or using a range is not documented well, and often leads to confusion, see for example


or

http://www.ruby-forum.com/topic/1393096#990065

The attached patch tries to clarify the documentation.
=end

Associated revisions

Revision ab63d24b - 07/03/2012 11:29 PM - drbrain (Eric Hodel)
- array.c (rb_ary_aref): Updated documentation to indicate the starting index is an index into the array or string. Updated examples to show behavior of indexes at the end of an array or string. Based on patch by Marcus Stollsteimer. [Bug #6680]
- array.c (rb_ary_aset): ditto.
- string.c (rb_str_aref): ditto. Also added descriptive argument names to call-seq section.

Revision 36298 - 07/03/2012 11:29 PM - drbrain (Eric Hodel)
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array.c (rb_ary_aref): Added a description of the behavior of index positioning. [Bug #6680]
string.c (rb_str_aref_m): Added a description of the behavior of index positioning

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@36328 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

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#1 - 07/01/2012 11:58 AM - drbrain (Eric Hodel)
- Assignee set to drbrain (Eric Hodel)
- Target version set to 2.0.0
- Category set to doc
This issue was solved with changeset r36298.
Marcus, thank you for reporting this issue.
Your contribution to Ruby is greatly appreciated.
May Ruby be with you.

- array.c (rb_ary_aref): Updated documentation to indicate the starting index is an index into the array or string. Updated examples to show behavior of indexes at the end of an array or string. Based on patch by Marcus Stollsteimer. [Bug #6680]
- array.c (rb_ary_aset): ditto.
- string.c (rb_str_aref): ditto. Also added descriptive argument names to call-seq section.

I chose to indicate that the start offset is an index instead of your text, but I kept your examples since the behavior isn't documented.

Hi Eric,

thank you, there are definitely some improvements here.

But: in my opinion the documentation is still unsatisfactory. Having the examples surely helps in making clear that the behavior is desired, but there is still no explanation.

The discussions I linked to in the original bug report show that people are puzzled by the seemingly illogical behavior, specifically that the same index value sometimes does lie in the valid range and sometimes does not:

```
a = [1, 2, 3, 4]
a[4] #=> nil
a[4, 1] #=>
```

Providing a consistent explanation really would help.

I attached two alternative suggestions for consideration.

Regards,
Marcus

Hi Eric,

there is a typo in the new examples, see new patch:

in the "special cases", a[6] should be a[6, 1], to show the difference between a[a.size, length], which is a valid range, and a[a.size + 1, length], which is not in valid range.

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- array.c (rb_ary_aref): Added a description of the behavior of index positioning. [Bug #6680]
- string.c (rb_str_aref_m): Added a description of the behavior of index positioning

#8 - 07/06/2012 06:54 AM - drbrain (Eric Hodel)
I incorporated the ideas of your two patches which seem to help clarify things. Let me know if this latest patch needs further adjustment.

Files

<table>
<thead>
<tr>
<th>Patch Name</th>
<th>Size</th>
<th>Date</th>
<th>Author</th>
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<td>rdoc_for_array_and_string_slice.patch</td>
<td>2.83 KB</td>
<td>07/01/2012</td>
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<td>rdoc_for_array_and_string_slice_2_v1.patch</td>
<td>2.02 KB</td>
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<td>typo_in_rdoc_for_array_and_string_slice.patch</td>
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<td>07/04/2012</td>
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