Bug #17675

StringIO#each_byte doesn't check for readability while iterating

03/07/2021 01:48 AM - wyhaines (Kirk Haines)

Status: Closed
Priority: Normal
Assignee: 
Target version: 
ruby -v: 
Backport: 2.5: UNKNOWN, 2.6: UNKNOWN, 2.7: UNKNOWN, 3.0: DONE

Description
Bug #17661 is a failure to check readability on each_byte of an IO, causing a segmentation fault.

StringIO has an independent, but related implementation, and it shares the same flaw in its implementation, where it fails to check for the readability of the StringIO object while iterating over the bytes. Unlike IO, this does not result in a segmentation fault. It does, however, allow the continued reading from an object that has been closed.

```ruby
require "stringio"

strio = StringIO.new
strio.each_byte do |byte|
  puts byte
  strio.close
end
```

That code should print the first byte, and then throw an IOError, but instead, it iterates through the entire data buffer for the object, calling the block for each byte, without ever raising an exception.

I have a PR for this which I will submit on Github and link to.
The PR simply inserts an appropriate check into the loop for each_byte.

Associated revisions
Revision 32a13591 - 03/08/2021 01:13 AM - nobu (Nobuyoshi Nakada)
[ruby/stringio] Check if closed in loop
[Bug #17675] https://bugs.ruby-lang.org/issues/17675
https://github.com/ruby/stringio/commit/1ed61d0cbc

History
#1 - 03/07/2021 02:00 AM - wyhaines (Kirk Haines)
The PR is:
https://github.com/ruby/ruby/pull/4245

#2 - 03/07/2021 02:20 AM - nobu (Nobuyoshi Nakada)
Please submit to https://github.com/ruby/stringio

#3 - 03/08/2021 02:47 AM - nobu (Nobuyoshi Nakada)
- Status changed from Open to Closed

Applied in changeset gill32a13591e0bb6e96b05452e214f14eda21ee3aa9

[ruby/stringio] Check if closed in loop
[Bug #17675] https://bugs.ruby-lang.org/issues/17675
https://github.com/ruby/stringio/commit/1ed61d0cbc
- Backport changed from 2.5: UNKNOWN, 2.6: UNKNOWN, 2.7: UNKNOWN, 3.0: UNKNOWN to 2.5: UNKNOWN, 2.6: UNKNOWN, 2.7: UNKNOWN, 3.0: DONE

Backported into ruby_3_0 at e6fced73e55dda487f026c929d97542cf1832252. Thank you hsbt san.