

The issue:

It's semantically incorrect to use a separator in a list. This creates issues down the line for assistive technologies.

Solutions:

There's not much about this issue online, but the few cases where it arose, there were two solutions: remove the separator because it's useless (or make it aria-hidden because there's a need to keep some presentation) and split the list into two sublists.

A third solution found would be to encapsulate both of these sublists in a list themselves to keep some relation between them, but this would create complexity with skipped levels and such so I decided not to use it.

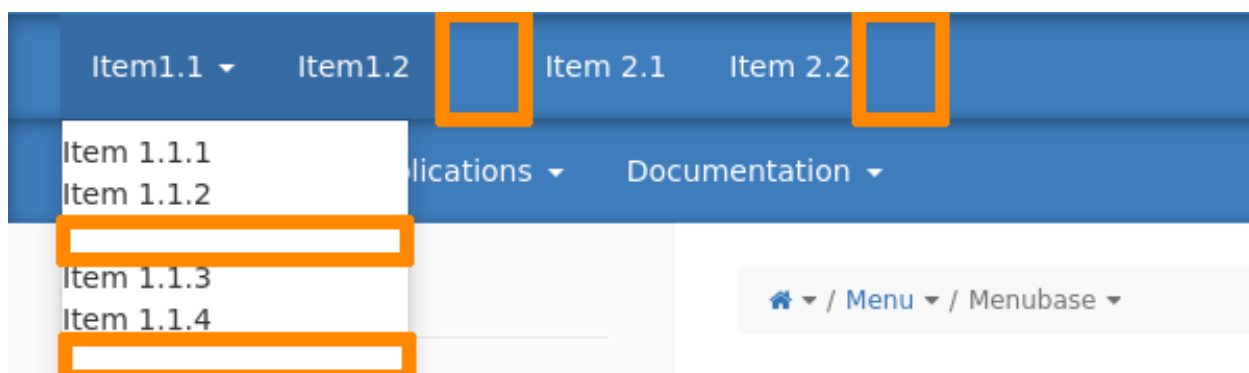
Example:

Let's take this mock `Menu Structure` defined by the admin of a XWiki instance:

(1) Default menu structure

- Item1.1
 - Item 1.1.1
 - Item 1.1.2
 -
 - Item 1.1.3
 - Item 1.1.4
 -
- Item1.2
-
- Item 2.1
- Item 2.2
-

This is currently displayed with all empty lines interpreted as separators:

**Bugs:**

- Top level separators change color when hovered.

- Screen readers will read the list in the navbar as having 6 child elements (counts separators) and in the submenu as having 6 child elements.

Corrections:

First, it's easy to say that we want the separators at the end of menus to be filtered out. They do not separate anything.

(2) Menu structure without end separators

- Item1.1
 - Item 1.1.1
 - Item 1.1.2
 -
 - Item 1.1.3
 - Item 1.1.4
- Item1.2
-
- Item 2.1
- Item 2.2

The second level separator here is mostly a matter of good practice: from the name of the items we can deduce that it's purely for presentation and does not mean anything semantically. We can remove it altogether or set its `aria-hidden=true`.

(3.1) Menu structure with only semantically correct separators (incorrect removed)

- Item1.1
 - Item 1.1.1
 - Item 1.1.2
 - Item 1.1.3
 - Item 1.1.4
- Item1.2
-
- Item 2.1
- Item 2.2

(3.2) Menu structure with only semantically correct separators (incorrect aria-hidden)

- Item1.1
 - Item 1.1.1
 - Item 1.1.2
 - (aria-hidden)
 - Item 1.1.3
 - Item 1.1.4
- Item1.2
-
- Item 2.1

- Item 2.2

Replacing the last separator is a bit more difficult: the obvious solution would be to separate both parts in different lists. This would only happen when rendering the macro, and replace all separator with a HTML segment such as this one:

```
`</ul> <br> <ul>`
```

This way, using our example, when a screen reader goes through the menu, it will first read a list with 2 elements and then a list with 2 elements.

This is quite strong in terms of semantics, so there's a need to make sure all separators left by this operation are actually semantically relevant.

(4) Menu structure with semantic break

- Item1.1
 - Item 1.1.1
 - Item 1.1.2
 - Item 1.1.3
 - Item 1.1.4
- Item1.2

<Separator>

- Item 2.1
- Item 2.2