

# Visual Indicators (was Affordances)

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[New proposal Feb 12th](#)

## SC: Visual Indicators (updated Feb 6)

*Level A*

Each interactive user interface component provides a visual indicator which conveys that it can be acted upon. The indicators used on user interface components are not used by other types of content on the same page.

Except where:

- The interface component is disabled
- The interface component visually indicates a state or value within the component
- The interface component consists of a group of horizontally or vertically aligned options within a list or menu [understanding doc to expand on this]

### Version scoped to controls required to progress

Controls needed to progress or complete a process have a visual indicator that conveys the type of control.

### Visual Indicator

A non-text line, border, space around the object, descriptive text or descriptive icon as the button itself which indicates it is interactive.

**Note:** We suggest using familiar visual indicators for the component when possible to help inform the user of how they can interact with the control. (i.e., traditional radio buttons, checkboxes, form inputs, buttons, links, etc.)

### FALLBACK SC proposal

Alternative wording that turns it into a passive SC to allow users to use a plugin to add affordances and prevents authors from messing that up. It is modeled off 1.4.12

In content implemented using markup languages that support [visual adaptation of user interface components](#), one of the following is true, with no loss of content or functionality, and by changing no other style property:

1. A user agent or plugin can adjust:
  - Button and input borders up to 3px (CSS) in width
  - link underlines up to 2px (CSS) in width
2. There is a mechanism available on the page where
  - Button and input have borders with at least a 3:1 ratio
  - link underlines with at least a 3:1 ratio
3. On page load:
  - Buttons and inputs have borders with at least a 3:1 ratio
  - link underlines up to 1px (CSS) in width with at least a 3:1 ratio

**NOTE:** This language would need to be wordsmithed... if the concept is approved.

## Visual Adaptation

The adjustment of content style properties using DOM manipulation via plugin or directly in the user agent.

## PLAIN LANGUAGE

One of the following is true

1. The content doesn't prevent a user from using a plugin that provides adjustable borders on button and input and underlines for links
2. A control on the page provides this
3. Buttons and inputs have borders and links have underlines.

## RATIONALE

David tested with Stylus with the code below. It worked universally on all buttons because Stylus places the style at the end of the DOM and the bottom of the CSS cascade. It's a two colour border (white/black) so its always visible.

This could be turned into a simple one button browser plugin AT for Cognitive user (or a few buttons that can adjust the border colour and width etc). We can create that plugin in May 2020. I encourage others to try this in Stylus as a proof of concept.

```
button {  
  box-shadow: inset 0 0 0 2px black, 0 0 3px 1px white !important;  
  outline: white !important;
```

```

}
a:link {
    text-decoration: underline;
}
[role="button"] {
    box-shadow: inset 0 0 0 2px black, 0 0 3px 1px white !important;
    outline: white !important;
}
[role="link"] {
    text-decoration: underline;
}

```

## Understanding

The purpose of this success criteria is to help people with cognitive disabilities, those with low vision, or people who have trouble perceiving colors to identify interactive controls. It will also assist people who have difficulties with fine motor control to make it easier to locate a control or target area.

Affordances are an object's visual properties that show the possible actions users can take with it, thereby suggesting how they may interact with that object. For instance, a button can look as if it needs to be turned or pushed. The characteristics of the button which make it look "turnable" or "pushable" together form its affordances.

Affordances should not be used on non-interactive elements within the same page/system. For example, if an underline is used throughout the page to indicate links, it should not be used on static text.

## Discussion

- Could we require a visual border or background for the affordance for all interactive controls?
- If not, can do it with a list some exceptions, if so what would they be?
- If not how can we require the hit area to be indicated? Is there some exception language that would allow flexible design.
- Regarding contrast, how can we overcome the concern in SC 1.4.12 that authors will just remove the background rather than bump up contrast. This would punish people who can benefit from a low contrast affordance.
- How will the SC be implemented for interactive areas that are generally invisible unless using keyboard focus? Examples
  - Hotspots on images

- Forward / backward controls on slideshows
  - Overlays and coach marks
- Would common icon-only buttons be exempt e.g. x button to close windows, apps, modals.
- ADDED DEC 17, 2019. When I (David M) was teaching a mobile class I talked about this SC and the developers and designers wanted to ensure that we don't discourage developers from making the hit area bigger than the visual affordance. In other words, sometimes they make a button that looks a little smaller than it's hit area to make the visual design make sense, meanwhile, if the user misses the target a bit, the hit area extends beyond the button a bit so the finger can still activate it if the finger is not centred etc..

Other AT for Coga:

From Steve: AT bar from Southampton uni.

Immersive reader from MS.

[Examples from ecommerce sites](#) showing mixed use of buttons and links with and without affordances on the same screen (marked up screenshots)

[Examples collection](#), from various sources including pattern libraries.

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## **Older versions Archived SC text to keep comments**

### **Full SC Text**

All interactive controls have affordances that indicate that they are interactive, which indicate their active area, and which have a contrast of 3:1 with the background.

Exception: The visual presentation of the interactive control is controlled by the user agent and is not modified by the author.

#### **Affordance**

An interactive object's visual indication that a user can interact with it. It can be a non-text line, border, space around the object, or the descriptive text or icon as the button itself which indicates it is interactive.

Older version 2

Each interactive interface component provides a visual indicator, which conveys its active area and purpose. Where the visual indicator only uses color, the visual indicator has a contrast ratio of 3:1 with at least one adjacent color.

Older version 3

Each active user interface component provides a visual indicator which conveys its purpose. Where the visual indicator is a underline or an outline shape, the visual indicator has a contrast ratio of 3:1 with at least one adjacent color.

## Examples

Moved into a landscape document to provide more space:

<https://docs.google.com/document/d/1fw8C-uHkPzI9IH4wWXdzjRmyfxTHNIYX3vk62Xsph4M/edit?usp=sharing>