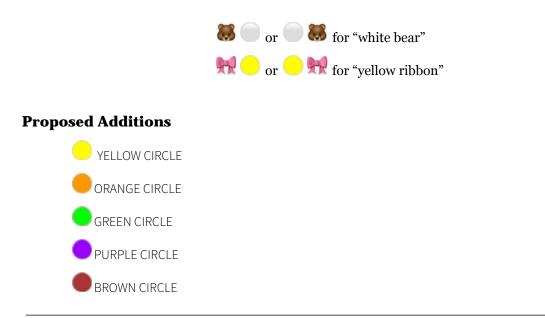
L2/18-141

Re: Emoji Colors From: ESC Date: 2018-04-24

Proposal

Add small number of emoji characters for use in sequences to indicate that the previous emoji has a different color. *While it would be possible to use these in ZWJ sequences, no RGI ZWJ sequences are requested at this time.* That is, these would normally occur as a sequence of separate emoji, such as:



Background

A very common request is for emoji of different colors. A polar bear, or a glass of white wine, or particular color of ribbon, etc. We don't foresee encoding all the characters for these, or even ZWJ sequences, but having basic "adjectives" for color — some of the most frequent descriptive adjectives — will go a long way towards improving expressiveness.

Note: these proposal from the ESC is for structural components, and thus doesn't follow the normal submission form.

The ESC has considered different models for accommodating this request. (Paul Hunt did some earlier work on colors in L2/16-318.) Since the domain is emoji, and "cartoonish" the range can be limited (and we only accept a limited number per year). Thus the following are proposed for inclusion in 2019:

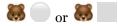
RED, ORANGE, YELLOW, GREEN, BLUE, PURPLE,

BLACK, WHITE, BROWN

The cleanest and most consistent model would be to use color "swatches" in sequences. However, to avoid adding an excessive number of characters, we can make use of the fact that we already have colored items encoded, listed at the end.

Hearts. The Hearts have the drawback that the fallback can be easily mistaken for different intent (eg that someone loves the previous or following character). Also best is to avoid the Emoji_Presentation

= No, since they require an extra code point (see list at end). So the best possibilities are the **circle** or **square**, such as for a white bear:



Squares. While the square might be semantically slightly more neutral, it would require two more emoji than the circles would — and squares are only *slightly* more neutral.

Circles. On this basis, the recommendation is to add the 5 colored circles that would be missing from the list above, for use in ZWJ sequences — or non-ZWJ sequences — to indicate color.

Future extensions

The list of colors are essentially unbounded, and across cultures, the set of colors considered to be "major"/ "primary" can be different. Pink might be considered a major color in some cultures, but just a pale/light red in others — the same for light blue (голубой). (For historial comparison, the original Crayola box contained eight colors: red, orange, yellow, green, blue, violet, brown, and black.)

All the 16,777,216 RGB colors cannot be encoded. But we do have the option of extending the colors in the future by specifying ZWJ sequences of colors that could be used to extend the palette, such as in the following examples:

Color	ZWJ Sequence	Hex
Pink		<u>#FF8080</u>
Dark red		<u>#800000</u>
Grey		<u>#808080</u>
Light blue 1		<u>#8080FF</u>
Silver		<u>#CoCoCo</u>
Light blue 2		<u>#CoCoFF</u>

To be clear, the above examples are just illustrative. As part of such an extension, we would need to devise a mechanism that provides a good range of colors with short sequences. These examples just take the initial colors and successively average with following white or black (in RGB space, rounding up).

Emoji 11.0 Colored Items

The following are sets of emoji v11 characters with specific colors.

EPre s	Chars	Code point	Name
Yes		U+2B1B	BLACK LARGE SQUARE
Yes		U+2B1C	WHITE LARGE SQUARE
Yes		U+25FD	WHITE MEDIUM SMALL SQUARE

Yes		U+25FE	BLACK MEDIUM SMALL SQUARE
Yes	0	U+26AA	MEDIUM WHITE CIRCLE
Yes	•	U+26AB	MEDIUM BLACK CIRCLE
Yes		U+1F534	LARGE RED CIRCLE
Yes		U+1F535	LARGE BLUE CIRCLE
Yes	•	U+1F499	BLUE HEART
Yes	•	U+1F49A	GREEN HEART
Yes	•	U+1F49B	YELLOW HEART
Yes	•	U+1F49C	PURPLE HEART
Yes	•	U+1F5A4	BLACK HEART
Yes	016	U+1F9E1	ORANGE HEART
No	•	U+25AA	BLACK SMALL SQUARE
No	D	U+25AB	WHITE SMALL SQUARE
No		U+25FB	WHITE MEDIUM SQUARE
No		U+25FC	BLACK MEDIUM SQUARE
No	*	U+2665	BLACK HEART SUIT
No	•	U+2764	HEAVY BLACK HEART