Introduction
Depending on how they are counted, up to about 170 pictographic characters in ISO 10646 represent people, faces, hands or other body parts. The images shown for these, and in particular the default emoji-style color emoji images used on a given platform, depict one particular physical appearance out of the wide range of ways in which the appearances of real people vary, which include skin tone, hair style & color, facial hair, eye color & shape, use of eyeglasses, body size and so on. The emoji-style appearance may be more non-realistic, generic and cartoonish, as with the typical presentation of the emoticon “smiley,” or it may be more realistic, as with the presentations of characters like MAN and WOMAN used on some platforms. The normal emoji-style presentation of many pictographic characters on different platforms is shown in http://www.unicode.org/reports/tr51/full-emoji-list.html.

Users need to be able to interchange characters with some confidence about how they will be displayed on other platforms; the presentations of a given character on various platforms should not be so different that they cause confusion among message recipients about the intended meaning of a message. For this reason, the emoji presentations of most of the pictographic characters, including those for people and body parts, currently have a relatively similar appearance across multiple platforms. Most notably, nearly all of the emoji presentations for people-related emoji use a light skin tone (see the list referenced above).

Not surprisingly, this homogeneity in representation of people has brought a lot of negative attention to these characters in ISO 10646 and Unicode, and to their appearance on various platforms. Many emoji users want to have more diversity in the representation of people and body parts in emoji—that is, for a given character such as MAN, they want to be able to select from among multiple physical appearances—and they have communicated this desire in public forums, via petitions, and via direct feedback to platform implementers and to the Unicode Consortium (see Background section for more information). Moreover, these users want to interchange emoji characters for people in a way that preserves key aspects of diverse physical
appearance. By far the most important aspect of physical appearance about which people feel strongly is a choice of skin tone.

**Proposal**

This document proposes the addition of five symbol modifier characters which can indicate the skin tone that should be used for an emoji-style presentation of a pictographic character depicting a person or people, a face, or a hand or body part. Key aspects:

- Such characters must not be default-ignorable, since receivers need to get a clear visual representation that a skin tone was intended, so an approach using variation selectors was not pursued.
- There are five modifiers generally based on the six tones of the Fitzpatrick scale, with separate modifiers corresponding to each of Fitzpatrick types III - VI and a single modifier corresponding to Fitzpatrick types I and II (see Fitzpatrick Scale Examples in Background below). Although the Fitzpatrick scale was developed for use in dermatology, it is also used in cosmetology and fashion design; it has the advantage of being a recognized external standard without negative associations.

<table>
<thead>
<tr>
<th>Code</th>
<th>Sample chart image</th>
<th>Name</th>
<th>Fitzpatrick scale approximate equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1F3FB</td>
<td><img src="image1" alt="Sample Chart" /></td>
<td>LIGHT SKIN TONE</td>
<td>Types I and II</td>
</tr>
<tr>
<td>1F3FC</td>
<td><img src="image2" alt="Sample Chart" /></td>
<td>MEDIUM LIGHT SKIN TONE</td>
<td>Type III</td>
</tr>
<tr>
<td>1F3FD</td>
<td><img src="image3" alt="Sample Chart" /></td>
<td>MEDIUM SKIN TONE</td>
<td>Type IV</td>
</tr>
<tr>
<td>1F3FE</td>
<td><img src="image4" alt="Sample Chart" /></td>
<td>MEDIUM DARK SKIN TONE</td>
<td>Type V</td>
</tr>
<tr>
<td>1F3FF</td>
<td><img src="image5" alt="Sample Chart" /></td>
<td>DARK SKIN TONE</td>
<td>Type VI</td>
</tr>
</tbody>
</table>
Display and usage

The default representation of these alone is as a color swatch, such as 🅱️. This may fall back to a black and white stripped or hatched image such as 🅱️ where colored emoji are not supported. However, if one of these characters follows a character for one or more persons (WOMAN, KISS) or a character for a hand position or a body part (VICTORY HAND, NOSE), then the desired representation is to show the sequence as a single glyph corresponding to the image for the person(s) or body part with the specified skin tone:

😊 + 🅱️ → 💏
😊 + 🅱️ → 😊

This mechanism alone does not provide a way to designate different skin tones for each person in an emoji image that represents multiple people (such as MAN AND WOMAN HOLDING HANDS). However, it is expected that emoji users will indicate such groupings by extending already-developing emoji usage conventions in which sequences of emoji are read as representing a single unit; for example, the character for MAN AND WOMAN HOLDING HANDS (with generic appearance) could be replaced or followed by the emoji characters for the two participants (MAN and WOMAN), each using a skin tone symbol. That is a usage convention, not an encoding mechanism.

It is expected that the default emoji presentation of the people-related pictographs—the appearance that would be used when not followed by a skin tone modifier symbol—will change in many implementations to become more neutral and generic about many aspects of physical appearance, including skin tone (for example the default presentation would use a more cartoonish presentation with a non-realistic skin tone, such as that typically used for the smiley faces: 😊, 😊, 😊, etc).

Input systems may use a two-step approach for selecting people emoji, in which (for example) a generic WOMAN character is selected, then a mechanism is provided to select a skin tone is desired.

Background
Selected public input (there are many more):

- Apple and Google: Support Equality, Make Diverse Emojis!
  - http://www.change.org/petitions/apple-and-google-support-equality-make-diverse-emojis
- Apple: Add More Diversity to the Emoji Keyboard
  - https://www.dosomething.org/petition/emojis
- Unicode Unveils 250 New Emoji, Gets Thumbs Down For Diversity
Apps:

- iDiversicons
  - http://www.idiversicons.com
- soulbe
- Black Emoji
- oju emoticon app

Emoji usage:

- sticker and emoji usage in mobile messaging apps
- Global mobile market data

Scale

- Fitzpatrick Scale Examples:

ISO/IEC JTC 1/SC 2/WG 2
PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646

Please read Principles and Procedures Document (P & P) for guidelines and details before filling this form.

A. Administrative

1. Title: Skin tone modifier symbols
2. Requester's name: Unicode Consortium
3. Requester type (Member body/Liaison/Individual contribution): Liaison Contribution
4. Submission date: 2014-09-11
5. Requester's reference (if applicable): 
6. Choose one of the following:
   - This is a complete proposal: Yes

B. Technical – General

1. Choose one of the following:
   ...

   - b. The proposal is for addition of character(s) to an existing block: Yes
     Name of the existing block: Miscellaneous Symbols and Pictographs

2. Number of characters in proposal: 5
3. Proposed category (select one from below - see section 2.2 of P&P document):
(None of the listed categories is applicable)

4. Is a repertoire including character names provided? Yes
   a. If YES, are the names in accordance with the "character naming guidelines" in
      Annex L of P&P document? Yes
   b. Are the character shapes attached in a legible form suitable for review? Yes

5. Fonts related:
   a. Who will provide the appropriate computerized font to the Project Editor of
      10646 for publishing the standard? The Unicode Consortium
   b. Identify the party granting a license for use of the font by the editors (include
      address, e-mail, ftp-site, etc.): The Unicode Consortium

6. References:
   a. Are references (to other character sets, dictionaries, descriptive texts etc.)
      provided? References are provided to other pictographic characters, and to a
      relevant classification system (Fitzpatrick Scale).
   b. Are published examples of use (such as samples from newspapers, magazines,
      or other sources) of proposed characters attached? There are no existing
      examples of characters with the proposed behavior.

7. Special encoding issues:
   Does the proposal address other aspects of character data processing (if
   applicable) such as input, presentation, sorting, searching, indexing, transliteration
   etc. (if yes please enclose information)? The prepended proposal addresses input
   and presentation issues

8. Additional Information

   C. Technical - Justification
   1. Has this proposal for addition of character(s) been submitted before? No
   2. Has contact been made to members of the user community (for example: National
      Body, user groups of the script or characters, other experts, etc.)? No
   3. Information on the user community for the proposed characters (for example: size,
      demographics, information technology use, or publishing use) is included? Over 110
      million people in China use emoji daily, over 44 million in the U.S. use emoji daily...
   4. The context of use for the proposed characters (type of use; common or rare):
      Common
   5. Are the proposed characters in current use by the user community? No
   6. After giving due considerations to the principles in the P&P document must the
      proposed characters be entirely in the BMP? No
   7. Should the proposed characters be kept together in a contiguous range (rather than
      being scattered)? Yes
   8. Can any of the proposed characters be considered a presentation form of an existing
      character or character sequence? No
9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters? No

10. Can any of the proposed character(s) be considered to be similar (in appearance or function) to, or could be confused with, an existing character? The black & white chart glyphs are somewhat similar to the chart glyphs for the shade characters 2591..2593. However the proposed characters have a different edge, different appearance in color, and have a different effect on preceding characters. If YES, is a rationale for its inclusion provided? Yes, see the prepended proposal.

11. Does the proposal include use of combining characters and/or use of composite sequences? No

12. Does the proposal contain characters with any special properties such as control function or similar semantics? No

13. Does the proposal contain any Ideographic compatibility characters? No