Proposal to Define Variation Sequences for Emoji Mapped to Legacy Computing Symbols

Author: Charlotte Buff  
Mail: irgendeinbenutzername@gmail.com  
Submitted: 2023-06-26

1. Background

The character repertoire proposed in L2/21-235r (Bettencourt et al., Proposal to add further characters from legacy computers and teletext to the UCS), AKA “Legacy Computing Supplement”, unifies a number of different character sets. Symbols from these sets map to both newly proposed characters (planned to be released in Unicode 16.0) as well as existing code points, some of which are classified as emoji.

Whenever a Unicode character is mapped to both emoji and non-emoji sources, it is customary to define emoji variation sequences for it to allow proper usage in both contexts. This was most recently done in Unicode 9.0 for a number of emoji originating from Japanese carrier sets that were unified with symbols from Wingdings and Webdings. Colourful, whimsical emoji glyphs would be especially out of place when emulating terminals and retro computers, so in this document I propose giving the same treatment to the Legacy Computing Supplement source sets for the Unicode 16.0 release.

2. Proposed Sequences

As of (draft) Unicode Emoji 15.1 there are nine emoji that are mapped to Legacy Computing Supplement characters and don’t already have emoji variation sequences defined. One additional such character (U+1F514) was identified in the character sets that were the subject of the original legacy computing proposal, L2/19-025 (Ewell et al., Proposal to add characters from legacy computers and teletext to the UCS), for a total of ten. Mappings were taken from the various tables attached to both documents.

<table>
<thead>
<tr>
<th>Unicode Code Point</th>
<th>Source Set</th>
<th>Source Code Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>U+1F333 Deciduous Tree</td>
<td>Ohio Scientific</td>
<td>0x0D</td>
</tr>
<tr>
<td>U+1F34E Red Apple</td>
<td>Sharp MZ (EU alternate)</td>
<td>0x9D</td>
</tr>
<tr>
<td>U+1F352 Cherries</td>
<td>Sharp MZ (EU alternate)</td>
<td>0x9E</td>
</tr>
<tr>
<td>U+1F353 Strawberry</td>
<td>Sharp MZ (EU alternate)</td>
<td>0x90</td>
</tr>
<tr>
<td>U+1F377 Wine Glass</td>
<td>Sharp MZ (EU alternate)</td>
<td>0x74</td>
</tr>
<tr>
<td>U+1F3E2 Office Building</td>
<td>Sharp MZ (EU alternate)</td>
<td>0xFB</td>
</tr>
<tr>
<td>U+1F40D Snake</td>
<td>Sharp MZ (JP primary)</td>
<td>0xDF</td>
</tr>
<tr>
<td>U+1F443 Nose</td>
<td>Sharp MZ-80 (EU)</td>
<td>0xBE</td>
</tr>
</tbody>
</table>
If this proposal is accepted, the following lines need to be added to `emoji-variation-sequences.txt`:

```
1F333 FE0E ; text style; # (6.0) DECIDUOUS TREE
1F333 FE0F ; emoji style; # (6.0) DECIDUOUS TREE
1F34E FE0E ; text style; # (6.0) RED APPLE
1F34E FE0F ; emoji style; # (6.0) RED APPLE
1F352 FE0E ; text style; # (6.0) CHERRIES
1F352 FE0F ; emoji style; # (6.0) CHERRIES
1F353 FE0E ; text style; # (6.0) STRAWBERRY
1F353 FE0F ; emoji style; # (6.0) STRAWBERRY
1F377 FE0E ; text style; # (6.0) WINE GLASS
1F377 FE0F ; emoji style; # (6.0) WINE GLASS
1F3E2 FE0E ; text style; # (6.0) OFFICE BUILDING
1F3E2 FE0F ; emoji style; # (6.0) OFFICE BUILDING
1F40D FE0E ; text style; # (6.0) SNAKE
1F40D FE0F ; emoji style; # (6.0) SNAKE
1F443 FE0E ; text style; # (6.0) NOSE
1F443 FE0F ; emoji style; # (6.0) NOSE
1F514 FE0E ; text style; # (6.0) BELL
1F514 FE0F ; emoji style; # (6.0) BELL
1F6F8 FE0E ; text style; # (10.0) FLYING SAUCER
1F6F8 FE0F ; emoji style; # (10.0) FLYING SAUCER
```