

NAME

Font::TTF::GSUB – Module support for the GSUB table in conjunction with TTOPen

DESCRIPTION

Handles the GSUB subtables in relation to TTOPen tables. Due to the variety of different lookup types, the data structures are not all that straightforward, although I have tried to make life easy for myself when using this!

INSTANCE VARIABLES

The structure of a GSUB table is the same as that given in Font::TTF::TTOpen. Here we give some of the semantics specific to GSUB lookups.

ACTION_TYPE

This is a string taking one of 4 values indicating the nature of the information in the ACTION array of the rule:

- g The action contains a string of glyphs to replace the match string by
- l The action array contains a list of offsets and lookups to run, in order, on the matched string
- a The action array is an unordered set of optional replacements for the matched glyph. The application should make the selection somehow.
- o The action array is empty (in fact there is no rule array for this type of rule) and the ADJUST value should be added to the glyph id to find the replacement glyph id value
- r The action array is a list of replacement glyphs in coverage order. This ACTION_TYPE is used only for Type 8 Reverse Chaining lookups which, by design, are single glyph substitution.

MATCH_TYPE

This indicates which type of information the various MATCH arrays (MATCH, PRE, POST) hold in the rule:

- g The array holds a string of glyph ids which should match exactly
- c The array holds a sequence of class definitions which each glyph should correspondingly match to
- o The array holds offsets to coverage tables

CORRESPONDANCE TO LAYOUT TYPES

The following table gives the values for ACTION_TYPE and MATCH_TYPE for each of the 12 different lookup types found in the GSUB table definition:

	1.1	1.2	2	3	4	5.1	5.2	5.3	6.1	6.2	6.3	8
ACTION_TYPE	o	g	g	a	g	l	l	l	l	l	l	r
MATCH_TYPE					g	g	c	o	g	c	o	o

Hopefully, the rest of the uses of the variables should make sense from this table.

METHODS

`$t->read_sub($fh, $lookup, $index)`

Asked by the superclass to read in from the given file the indexth subtable from lookup number lookup. The file is positioned ready for the read.

`$t->extension`

Returns the table type number for the extension table

`$t->out_sub($fh, $lookup, $index)`

Passed the filehandle to output to, suitably positioned, the lookup and subtable index, this function outputs the subtable to \$fh at that point.

AUTHOR

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LICENSING

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