KEYBOARD LAYOUT ANALYZER MANUAL

Abstract. KLA is a Qt software for analyzing keyboard layouts.

1. Copyright

2. How to use

A keyboard layout file is a plain text file. The first line contains the name and the second line contain all the characters in the layout (better to be ordered). The third line is important. You should put all the characters in the layout, separated by space and then you should define the position of the characters after the line that looks like this:

```
Row  Finger     Move       Shift
```

For example the character 'T' on the QWERTY keyboard is shown this way

```
1    3    1      0
```

It means that 'T' is on the first row, is hitted by finger 3, the figer must move a block to right, and needs shift. The rows enumerated from -1 to 2. On the QWERTY layout, rows that contain 'z', 'a', 'q', 1' are -1, 0, 1, 2, respectively. See Figure ?? for more info.

Figure 2 is an example of the QWERTY keyboard on a ANSI standard keyboard: The information after (Row Finger Move Shift) row is the same order that you enter the characters. For example the first character is ' which its information comes first, i.e, `2    0    -1    0` which means its on the row 2, is hitted by finger 0, the corresponding finger needs to move one block horizontally to left (normally the finger 0, left pinky, hit key 1, so it must move a block left to reach '), and the last 0 means that it doesn't need shift (put 1 if it needs shift).

Another examples: w " b B

```
1    1    0    0
0    9    1    1
-1   3    1    0
-1   3    1    1
```
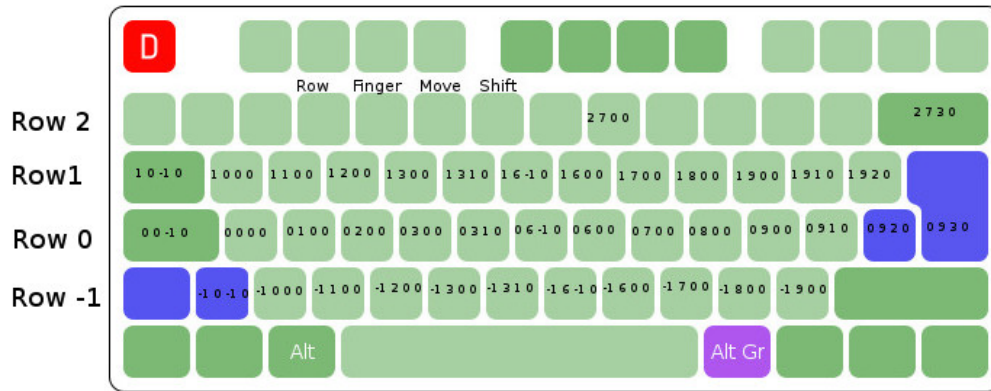
FIGURE 1. Rows explanation

```
US(QWERTY)
a b c d e f g h i j k l m n o p q r s t u v w x y z , . ; : ?
q w e r t y u i o p a s d f g h j k l ; z x c v b n m , . / Q W E R T Y ... V B N M < > ?
Row             Finger          Move            Shift
1               0               0               0
1               1               0               0
1               2               0               0
1               3               0               0
1               3               1               0
1               6               -1              0
1               6               0               0
.
.
.
-1              7               0               1
-1              8               0               1
-1              9               0               1
0               5               0               0
0               9               3               0
```

FIGURE 2. A sample layout file

Important: The last two line of the file is for space and return. They are of the following form on an ANSI keyboard

```
0   5   0   0
0   9   2   0
```

and of the following form on an ISO keyboard

```
0   5   0   0
0   9   3   0
```
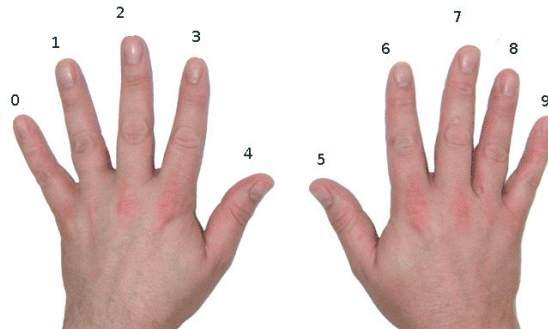
FIGURE 3. Fingers Numbers

Good news is that you normally don't need to write a layout file from scrach. I have created well-known layouts, QWERTY, COLEMAK, WORKMAN and DVO-RAK. You just need to choose any of these file and just replace the set of characters (third line) with your choice. Yes, It is that simple.