Some commands to display a Scrabble board, with or without words.

- English, French, German or Spanish version for points and labels.
- Ideas from https://tex.stackexchange.com/questions/194780/tikz-drawing-a-rectangle-with-spikes-on-borders

Thanks to Denis Bitouzé and Patrick Bideault for help and ideas!
Introduction

1 The Scrabble package

1.1 Source
Some ideas are from https://tex.stackexchange.com/questions/194780/tikz-drawing-a-rectangle-with-spikes-on-borders, with proposition from Mark Wibrow. This package is build within styles and ideas from Mark Wibrow.

1.2 Loading of the package, used packages
The package Scrabble loads within the preamble:

\usepackage{Scrabble}

It’s mostly compatible with \LaTeX, \pdflatex, \lualatex or \xelatex compilation!

It loads the following packages and libraries:

- tikz with (calc) with the tikzlibraries (calc) and (shapes.geometric);
- pgf and pgffor;
- xstring, xparse, simplekv and listofitems.

1.3 The package itself
The idea is to, thanks to TikZ, propose commands or environments to display a Scrabble™ board:

- independent;
- in an environment with words.

\ScrabbleBoard<language>[keys]
%independent command for the empty board
\begin{EnvScrabble}<language>[keys]
%environment with word(s)
\ScrabblePutWord[orientation]{word}{coordinates of the beginning cell}
\end{EnvScrabble}

1.4 Languages
The commands, environments et keys are in english, but cells can be displayed in:

- english (code ISO 639-1 EN);
- french (code ISO 639-1 FR);
- german (code ISO 639-1 DE);
- spanish (code ISO 639-1 ES).
2 Commands, keys and options

2.1 The board, standalone

The first argument, optional, between <...> is the (language) of the display, form the list :
- (EN) (english, default),
- (FR) (french),
- (DE) (german) et (ES) (spanish).

The second argument, optional, between [...] give the (keys) :

- (Scale) for the display (the initial unit is 1 cm) ;
  - default : (1)
- (ScaleLabels) for the cell’s names ;
  - default : (1)
- the boolean (Border) pour print a border outside the board ;
  - default : (true)
- the boolean (Labels) to print names of the special cells ;
  - default : (true)
- the boolean (Help) pour print numbers to reperate th cells ;
  - default : (false)

\ScrabbleBoard[Labels=false,Scale=0.55]\ READ
\ScrabbleBoard<ES>[Scale=0.55,Border=false] READ
2.2 The board with words

Here we can use the \textit{environment} with the specific \texttt{command} in order to print words on the board.

For the \textit{environment}, the options are the same as for the independent \texttt{command}!

For putting word on the board:

- the first argument, \textit{optional}, between \{\ldots\} is the orientation of the word, \{\texttt{H}\} (by default) or \{\texttt{V}\} ;
- the second argument, \textit{mandatory}, between \{\ldots\}, is the word, with uppercase or lowercase letters ;
- the last argument, \textit{mandatory}, between \{\ldots\}, is the coordinates of the first cell for first lettre (the cell (1;1) is south-west corner).

\textbf{Observation 1 :} the chosen language will display the right points in the tile!

\textbf{Observation 2 :} the white (or joker) is coded by the character *.

\begin{Code}{EnvScrabble}[Scale=0.75,Labels=false,Help]
\ScrabblePutWord{TIKZ}{1,13}
\ScrabblePutWord[V]{pstricks}{1,15}
\ScrabblePutWord[V]{KaTeX}{3,13}
\ScrabblePutWord[V]{cleveref}{1,10}
\ScrabblePutWord[V]{METAPOST}{7,11}
\ScrabblePutWord{LUALATEX}{5,8}
\ScrabblePutWord[V]{ProfLy*ee}{11,15}
\ScrabblePutWord[V]{PROFCOLLE*E}{1,1}
\ScrabblePutWord{SYNTAX}{7,5}
\ScrabblePutWord[V]{STRIN*}{10,6}
\end{EnvScrabble}
2.3 *Inline word*

The idea is to propose a command to insert a word in *online* mode, with automatic adjustment of size and position.

\begin{verbatim}
\ScrabbleWord[\texttt{keys}]{word}
\end{verbatim}

The first argument, *optional*, between \[\ldots\] allows you to configure the \texttt{keys}:

- \texttt{Colback} for the color of the pieces ;
- \texttt{Font} for the font ;
- \texttt{Colfonte} for the color of the characters ;
- \texttt{Lang} to choose the language (for the number of points) ;
- \texttt{Offset} to specify horizontal spacing between pieces ;
- \texttt{Scale} to specify a base scale for texts ;
- \texttt{Score} which is a boolean to display the score of each piece.

**Note 1**: the code is responsible for positioning the pieces for \textit{satisfactory} alignment and scaling based on the active font.

**Note 2**: the \texttt{blank} (or \texttt{wildcard}) is obtained by the character \texttt{*}.

Test positioning \texttt{PYTHAG*RE} to see !

Positioning \texttt{PYTHAG*RE} to see !
History

\textbf{v0.1.4} : Command to insert \textit{inline} words
\textbf{v0.1.3} : Words in uppercase or lowercase, adjusted codes for language (ISO 639-1)
\textbf{v0.1.2} : Key \texttt{<ScaleLabels>} to modify scale of the cell’s names
\textbf{v0.1} : Initial version