Scrabble [en]

A board of Scrabble,

with words or not.

Scrabble™, from Hasbro™ and Mattel™.
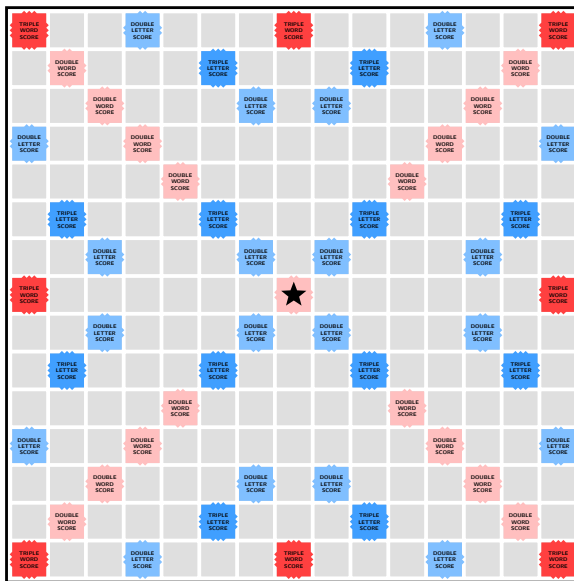
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▶ Some commands to display a Scrabble board, with or without words.

▶ 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, Patrick Bideault, quark67 and jmbeckers for help and ideas !

LATEX

pdfLATEX

LuaLATEX

TikZ

TEXLive

MiKTEX

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}
```
Code LATEX

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 Ti*k*Z, propose commands or environments to display a Scrabble™ board:

- *independent*;

- in an *environment* with words.

```
%independent command for the empty board
\ScrabbleBoard<language>[keys]

%environment with word(s)
\begin{EnvScrabble}<language>[keys]
    \ScrabblePutWord[orientation]{word}{coordinates of the beginning cell}
\end{EnvScrabble}
```
Code LATEX

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

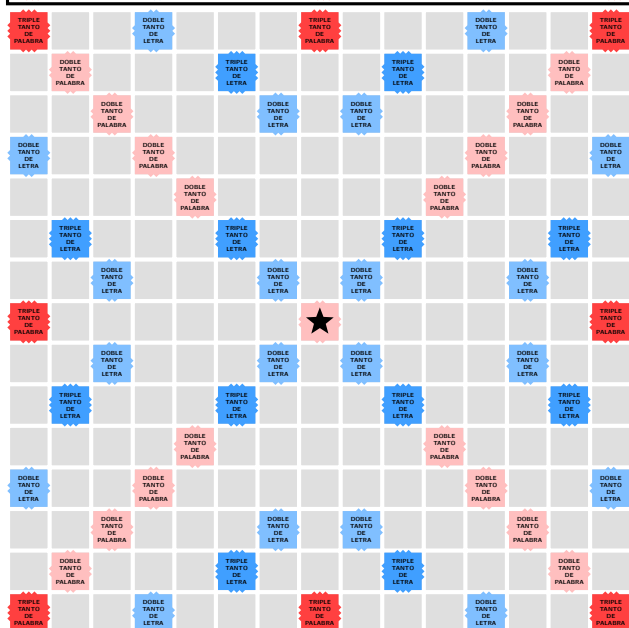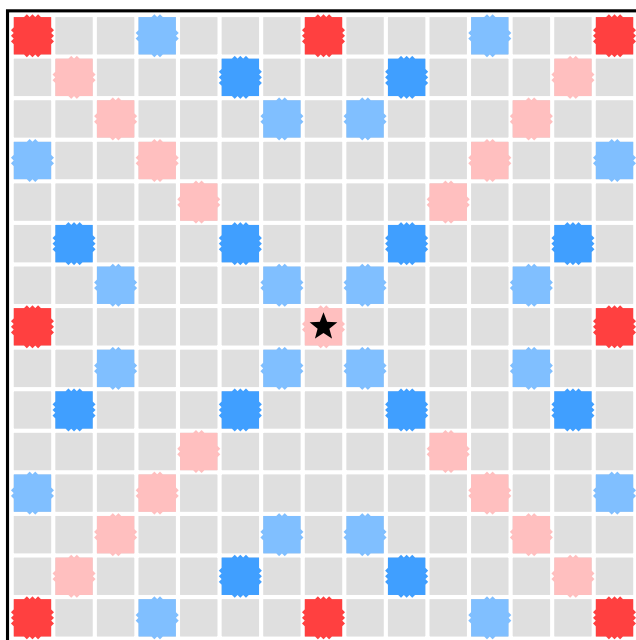The first argument, *optional*, between `<...>` is the **⟨langage⟩** of the display, form the list:
⟨**EN**⟩ (english, default), ⟨**FR**⟩ (french), ⟨**DE**⟩ (german) et ⟨**ES**⟩ (spanish).

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;   défaut: **⟨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]\\      %board without cell's names
\ScrabbleBoard<ES>[Scale=0.55,Border=false]    %board in spanish, without border
```

2.2 The board with words

Here we can use the environment with the specific command in order to print words on the board.

For the *environment*, the options are the same as for the independent command!
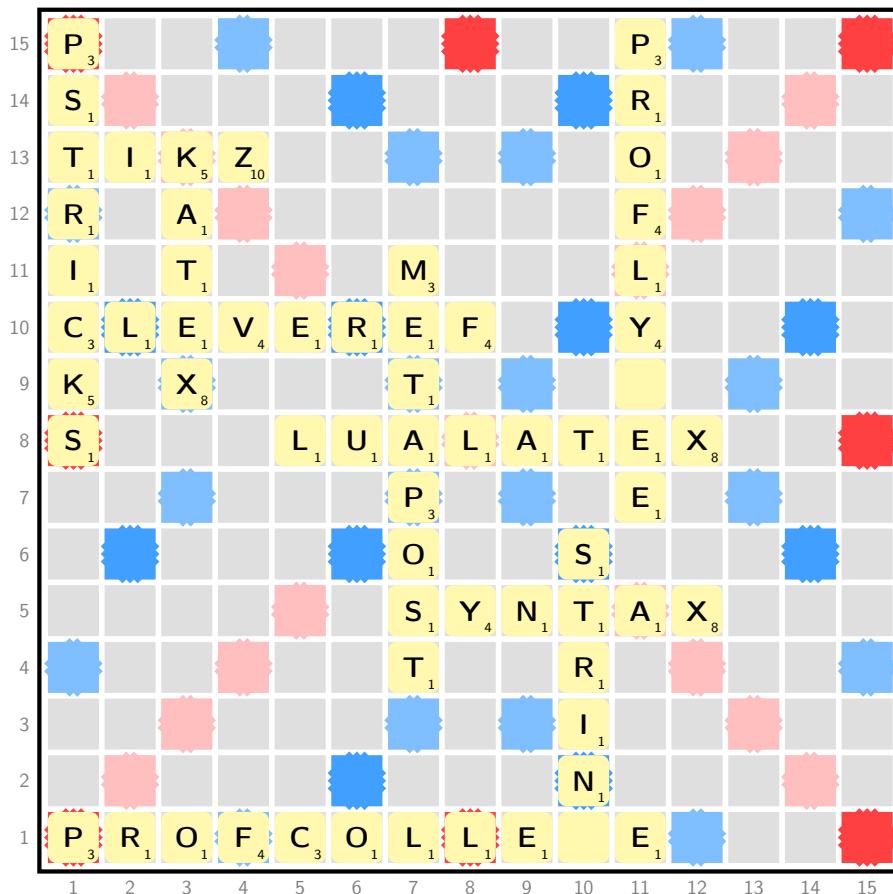
For putting word on the board:

- the first argument, *optional*, between [...] is the orientation of the word, ⟨**H**⟩ (by default) or ⟨**V**⟩;

- the second argument, *mandatory*, between {...}, is the word, with uppercase or lowercase letters;

- the last argument, *mandatory*, between {...}, is the coordinates of the first cell for fisrt lettre (the cell (1,1) is south-west corner).

Observation 1: the chosen language will display the right points in the til!

Observation 2: the *white* (or *joker*) is coded by the character *.

```
\begin{EnvScrabble}[Scale=0.75,Labels=false,Help]
    \ScrabblePutWord{TIKZ}{1,13}
    \ScrabblePutWord[V]{pstricks}{1,15}
    \ScrabblePutWord[V]{KaTeX}{3,13}
    \ScrabblePutWord{cleveref}{1,10}
    \ScrabblePutWord[V]{METAPOST}{7,11}
    \ScrabblePutWord{LUALATEX}{5,8}
    \ScrabblePutWord[V]{ProfLy*ee}{11,15}
    \ScrabblePutWord{PROFCOLLE*E}{1,1}
    \ScrabblePutWord{SYNTAX}{7,5}
    \ScrabblePutWord[V]{STRIN*}{10,6}
\end{EnvScrabble}
```
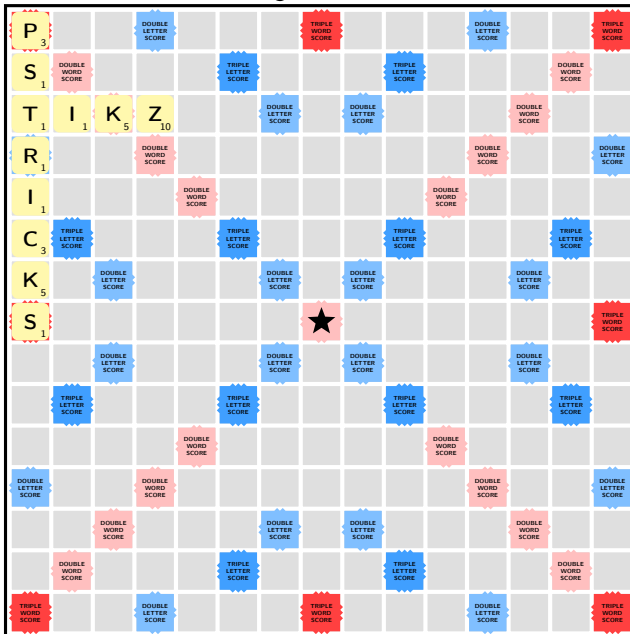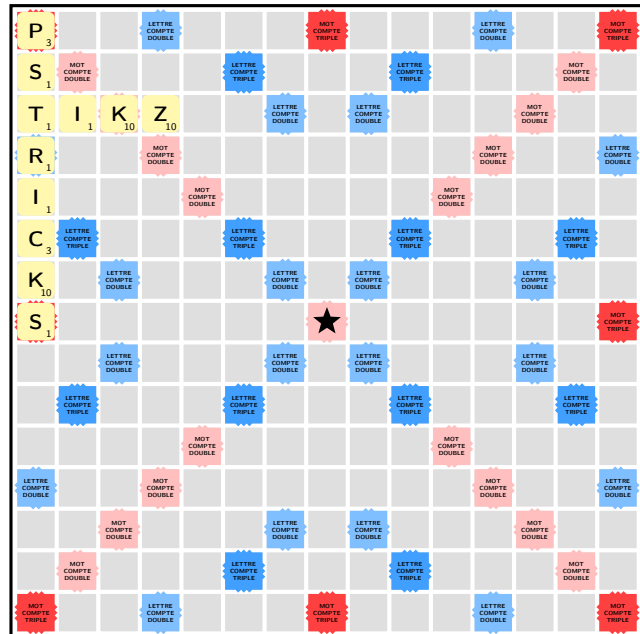
```
\begin{EnvScrabble}[Scale=0.55]
    \ScrabblePutWord{tikz}{1,13} \ScrabblePutWord[V]{PSTRiCKS}{1,15}
    \draw (7,15) node[font=\LARGE\sffamily] {English version} ;
\end{EnvScrabble}~~~
\begin{EnvScrabble}<FR>[Scale=0.55]
    \ScrabblePutWord{tikz}{1,13} \ScrabblePutWord[V]{PSTRiCKS}{1,15}
    \draw (7,15) node[font=\LARGE\sffamily] {French version} ;
\end{EnvScrabble}\\
\begin{EnvScrabble}<DE>[Scale=0.55]
    \ScrabblePutWord{tikz}{1,13} \ScrabblePutWord[V]{PSTRiCKS}{1,15}
    \draw (7,15) node[font=\LARGE\sffamily] {German version} ;
\end{EnvScrabble}~~~
\begin{EnvScrabble}<ES>[Scale=0.55]
    \ScrabblePutWord{LaTeX}{1,14} \ScrabblePutWord[V]{Madrid}{2,15}
    \draw (7,15) node[font=\LARGE\sffamily] {Spanish version} ;
\end{EnvScrabble}
```
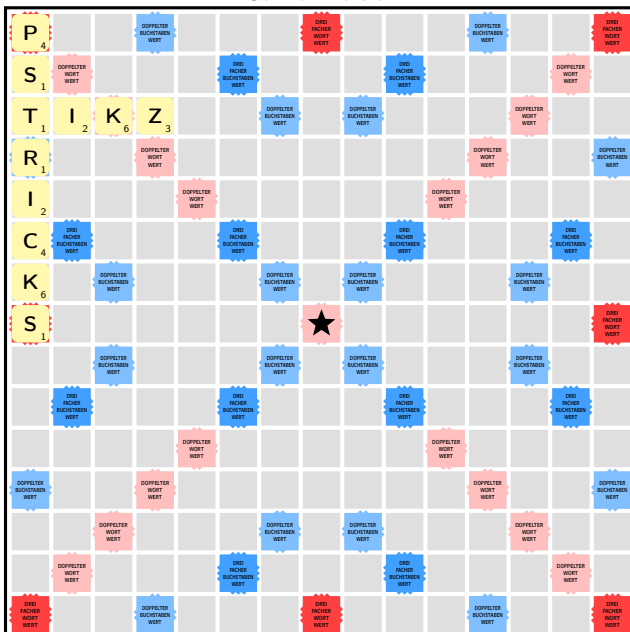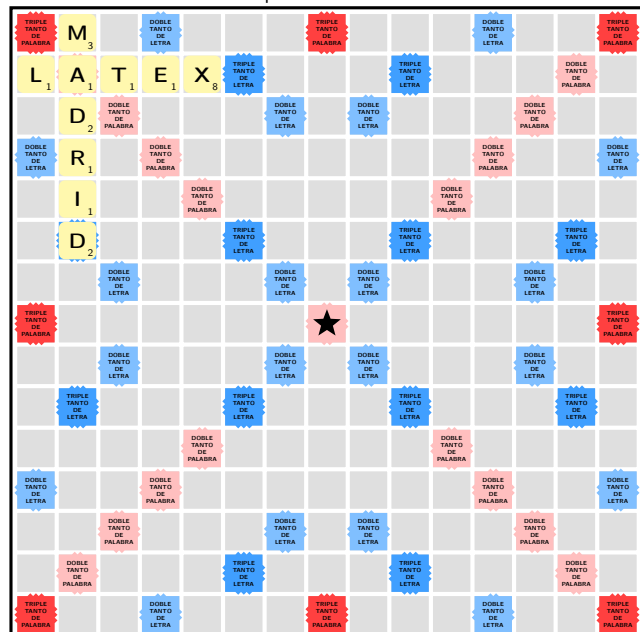
English version

French version

German version

Spanish version

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.

```
%command to put inline word
\ScrabbleWord[keys]{word}
```

The first argument, *optional*, between [...] allows you to configure the ⟨**keys**⟩:

- ⟨**Colback**⟩ for the color of the pieces   default: ⟨**yellow!40**⟩

- ⟨**Font**⟩ for the font;   default: ⟨**\bfseries\sffamily**⟩

- ⟨**Colfonte**⟩ for the color of the characters;   default: ⟨**black**⟩

- ⟨**Lang**⟩ to choose the language (for the number of points);   default: ⟨**EN**⟩

- ⟨**Offset**⟩ to specify horizontal spacing between pieces;   default: ⟨**0.1pt**⟩

- ⟨**Scale**⟩ to specify a base scale for texts;   default: ⟨**0.6**⟩

- ⟨**Shuffle**⟩ (boolean) to mix letters;   default: ⟨**false**⟩

- ⟨**Score**⟩ which is a boolean to display the score of each piece.   default: ⟨**true**⟩

Note 1: the code is responsible for positioning the pieces for *satisfactory* alignment and scaling based on the active font.
Note 2: the *blank* (or *wildcard*) is obtained by the character *.

```
Online Scrabble word test positioning \ScrabbleWord{TE*ST} to see!
```

Online Scrabble word test positioning T₁ E₁   S₁ T₁ to see!

```
{\Huge\sffamily Test positioning \ScrabbleWord[Colback=teal!5,Colfonte=orange]{PYTHAG*RE} to see!}
```

Test positioning P₃ Y₄ T₁ H₄ A₁ G₂   R₁ E₁ to see!

```
\scalebox{3}[3]{Positioning \ScrabbleWord[Lang=DE,Font=\ttfamily,Scale=0.75,Shuffle]{PYTHAG*RE} to see!}
```

Positioning T₁ A₁ E₁ P₄ G₂ H₂   R₁ Y₁₀ to see!

```
{\LARGE Test positioning \ScrabbleWord[Score=false,Offset=1pt,Colback=orange!50]{PSTRICKS} to see!}
```

Test positioning P S T R I C K S to see!

2.4   Special letters

It is possible to use special characters, for the languages <DE> and <ES>, but for compatibility reasons, special characters are *coded* by numbers:

- 0 code the letter $\boxed{\text{Ö}}$ with 8 points;

- 1 code the letter $\boxed{\text{Ä}}$ with 6 points;

- 4 code the letter $\boxed{\text{Ü}}$ with 6 points;

- 6 code the *letter* $\boxed{\text{CH}}$ with 5 points;

- 7 code the letter $\boxed{\text{Ñ}}$ with 8 points;

- 8 code the *letter* $\boxed{\text{RR}}$ with 8 points;

- 9 code the *letter* $\boxed{\text{LL}}$ with 8 points.

```
{\Huge \ScrabbleWord[Lang=DE,Font=\ttfamily,Scale=0.75]{104AAA}}

{\Huge \ScrabbleWord[Lang=ES,Font=\sffamily,Scale=0.75]{R070SO689}}
```

History

`v0.1.8 :`   Bugfix

`v0.1.7 :`   Key [Shuffle] for inline words

`v0.1.6 :`   Bugfix with *joker* ; enhancements for <DE> board

`v0.1.5 :`   Special letters for <DE> and <ES>

`v0.1.4 :`   Command to insert *inline* words

`v0.1.3 :`   Words in uppercase or lowercase, adjusted codes for language (ISO 639-1)

`v0.1.2 :`   Key <ScaleLabels> to modify scale of the cell's names

`v0.1   :`   Initial version