

# The flacards class

Version 0.1.1

N. Stuhmann\*

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## 1 Introduction

This class provides an easy interface to produce flashcards. It will produce several user-defined cards per page with front- and backside. You can put associated pieces of information on each side like vocabularies.

This class is similar to the `flashcards` class from Alexander M. Budge.

## 2 Installation

Put `flacards.cls` somewhere in your TeX tree and update your package database.

## 3 Using the flacards class

### 3.1 Class Options

`frontgrid` This option produces an overlaid grid on the frontside for cutting the flashcards apart.  
`backgrid` Same as `frontgrid` but for backside.

All other options are passed through to the `article` class.

### 3.2 Creating Flashcards

Call `\card{<frontside>}{<backside>}` with `<frontside>` as the frontside content and `<backside>` as the backside content for each flashcard you want to print.

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\*[stuhmann@spamfence.net](mailto:stuhmann@spamfence.net)

### 3.3 Customization

#### 3.3.1 Page Layout

**Page Setup** By calling `\pagesetup{<columns>}{<rows>}` you define how many rows and columns of cards should be printed on each page. Default is

```
\pagesetup{3}{8}
```

The `\pagesetup` command sets two lengths, `\cardwidth` and `\cardheight`.

**Borders** Borders are (still) hardcoded as 1 cm on each side. You can change them using the geometry package, but keep in mind that you have to change inner and/or outer margin not left and right margins, since the layout is “twoside”.

#### 3.3.2 Card Layout

**Text Output** If you want to change the appearance of all your cards, for example, **bold** face on backside and *italic* on front side, you can simply redefine `\cardtextstylef` and `\cardtextstyleb`, which are called during card output just before the arguments of your `\card` call.

**Headline and Footer** For each card the output routine calls several macros to produce the headline and the footer of each card. The macros are named systematically (see also picture below):

<b>position</b>	<b>content</b>	<b>meaning</b>
1st character	f	for frontside
	b	for backside
2nd character	l	for left
	c	for center
	r	for right
tail	head	for headline
	foot	for footer

For instance `\blfoot` controls the content of the lower left corner of the backside of the card.

<code>\flhead</code>	<code>\fchead</code>	<code>\frhead</code>	<code>\blhead</code>	<code>\bchead</code>	<code>\brhead</code>
frontside			backside		
<code>\flfoot</code>	<code>\fcfoot</code>	<code>\frfoot</code>	<code>\blfoot</code>	<code>\bcfoot</code>	<code>\brfoot</code>

So, by redefining one of these macros, you can change the appearance of your cards. For instance, if you want the card number only on the frontside in the center of the headline, try the following:

```

\renewcommand{\frfoot}{}
\renewcommand{\brfoot}{}
\renewcommand{\fchead}{\thecardno}

```

\frfoot and \brfoot are predefined to contain the card number:

```

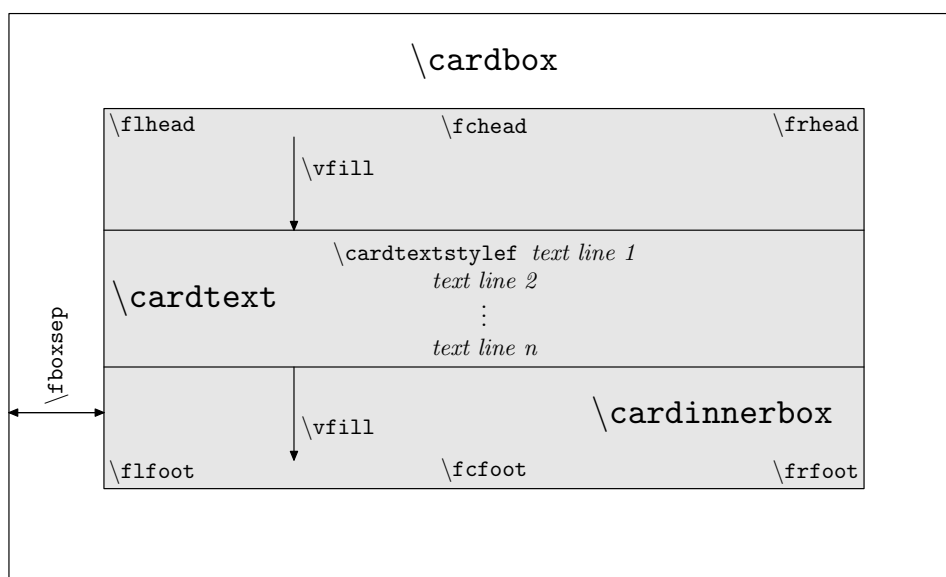
\renewcommand{\frfoot}{\footnotesize \thecardno}
\renewcommand{\brfoot}{\footnotesize \thecardno}

```

As you see, the card number is saved in a counter named cardno.

### 3.3.3 Card Layout – Advanced Interface

The following figure shows how each (frontside of a) card is build up:



The macro `\cardbox{<side>}{<text>}` is called by the output routine to create the main box. The parameter `<side>` must be either `f` or `b` for front or back side; `<text>` is the text, which should be typed out on the card (e.g. the vocabulary). This macro creates a box which is separated by `\fboxsep` from the outer box. (So, if you don't want to have any separation between the text and the frame around your card you should try `\fboxsep=0pt`.)

Inside this box `\cardinnerbox{<side>}{<text>}` is called to fill the box. Unless redefined, this macro prints headline followed by a `\vfill`, calls `\cardtext{<side>}{<text>}`, prints again a `\vfill` and finally the footer.

The macro `\cardtext{<side>}{<text>}` calls resp. `\cardtextstylef` for front side and `\cardtextstyleb` for back side and after that, it prints `<text>`.

By redefining these macros you can change the layout of your cards. You might want to look into the source code for deeper understanding.

## 3.4 Example

### 3.4.1 Simple

This is a simple example of german-english vocabulary.

```
\documentclass[frontgrid]{flacards}

\begin{document}
\card{gehen\\schlafen}{to go/to walk\\to sleep}
\card{hell, klar}{bright}
\card{mit\\ohne}{with\\without}
\card{Lernkarte}{flashcard}
\card{Wasser}{water}
\card{Saft}{juice}
\card{Fenster}{window}
\card{Linie}{line}
\card{und\\oder}{and\\or}
\card{Regen}{rain}
\end{document}
```

### 3.4.2 Extended Example with colors

This is a more sophisticated example using colors, defining header elements and using tables inside the cards.

```
\documentclass[a4paper,frontgrid]{flacards}
\usepackage{color}

% redefining center head on frontside
\renewcommand{\fthead}{%
  \vskip-3pt\fbboxsep=0pt%
  \colorbox{red}{%
    \small\sffamily\bfseries\textcolor{white}{%
      \parbox{\cardwidth}{\vskip3pt\centering Deutsch\vskip4pt}%
    }%
  }%
}

% redefining center head on backside
\renewcommand{\bthead}{%
  \vskip-3pt\fbboxsep=0pt%
  \colorbox{blue}{%
    \small\sffamily\bfseries\textcolor{white}{%
      \parbox{\cardwidth}{\vskip3pt\centering Espa\~nol\vskip4pt}%
    }%
  }%
}
```

```

}%
}

% redefining default text style for front side
\renewcommand{\cardtextstylef}{\bfseries}

% You can define head and foot elements using \flhead, \fthead
% and \frhead for right, center and right head on frontside,
% \flfoot, \fcfoot, \flfoot for footline on frontside.
% Analogical use \blhead, \bthead, \brhead, \blfoot, \bcfoot
% and \frfoot for backside.

\begin{document}
% 2x4 cards per page
\pagesetup{2}{4}

% change layout for left foot on front
\renewcommand{\flfoot}{\footnotesize Grammatik}

\card{Conjugation (pret\`erito imperfecto, regular)}
{\begin{tabular}{l|ll}
& cocin{\bfseries ar} & & viv{\bfseries ir}\\
\hrule height 1pt%-----
yo & cocin{\bfseries aba} & & viv{\bfseries `ia}\\
t`u & cocin{\bfseries abas} & & viv{\bfseries `ias}\\
usted, ella, `el & cocin{\bfseries aba} & & viv{\bfseries `ia}\\
nosotros/-as & cocin{\bfseries `abamos} & & viv{\bfseries `iamos}\\
vosotros/-as & cocin{\bfseries abais} & & viv{\bfseries `iais}\\
ustedes, ellos/-as & cocin{\bfseries aban} & & viv{\bfseries `ian}
\end{tabular}
}

\card{Conjugation (pret\`erito imperfecto, irregular)}
{\begin{tabular}{l|lll}
& ser & ir & ver\\
\hrule height 1pt%-----
yo & era & iba & ve`ia\\
t`u & eras & ibas & ve`ias\\
usted, ella, `el & era & iba & ve`ia\\
nosotros/-as & `eramos & `ibamos & ve`iamos\\
vosotros/-as & erais & ibais & ve`iais\\
ustedes, ellos/-as & eran & iban & ve`ian
\end{tabular}
}

```

```
}  
  
\renewcommand{\flfoot}{\footnotesize Vokabeln}  
\card{gehen}{ir}  
\card{sein}{ser/estar}  
\card{Land}{pais, {\em m}}  
\end{document}
```

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## 5 Changelog

Changelog:

0.1.1:

- bug fix: front side content also printed on back side
- updated examples
- improved/advanced interface for card layout

0.1:

- file creation