timetable package for LATEX

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1 Introduction

Still, in times when organisers are freely available on the net, there is need for a way to print out timetables. Such lists shall not only be informative and contain details such sspeaker, location, and time. They should also be pleasing to the eye and immediately reveal the information they contain. What else could be used for this task, if not LATEX?

The present version of timetable is fully compatible to version 1.3, and extends it by a new pdflatex support for which the backend has been entirely redesigned, as well as by several 'look&feel' features. The design including colours and font faces can now be redefined. Note that like its predecessor, version 1.4 is not compatible to 1.2 and below.

2 Command reference

Like in many other LATEX packages, macros are split into declaration part and body instructions:

2.1 Declaration

The commands presented in this section can be called at any time before the body is being processed, but do not necessarily need to be put before the \begin{document} tag. Instead, it might even be better to define these things within the document section, as this allows different configurations for several time tables appearing within one large document.

2.1.1 Layout

The general layout can be defined by these macros:

\setslotsize{width}{height} defines the dimensions of the time slots themselves, standard is 2.8cm×1.2cm.

\setslotcount{columns}{rows} specifies how many of these slots there are, 5×9 is predefined.

- \settextframe{width} changes the padding of text inside coloured boxed to be different than 0.8mm.
- \settopheight{rows} specifies how many slot heights the grey bar at the top should last, the default value is 2.
- \setbottomspace{width} sets the distance of the small entries at the bottom of each cell to some value different to 8pt.
- \setbottomstyle{fontsize} redefines the font size of the footlines in event blocks.

 It defaults to \scriptsize.
- \setprinttimestamps{type} includes timestamps at top and bottom, if set to 1, and timestamps at the top, if set to 2.
- \setframetype[valign]{type} changes the frame style. type can either be 1 (entries separated by lines), or 2 (entries in checkerboard layout (default)).valign can be one of t (top), c (centered), or b (bottom).
- \seteventcornerradius{radius} defines event corners to be rounded. Admissible values for radius are [0pt..7pt], default is 3pt.

In addition, one may redefine the following default colours:

ttframecol1 is the (brighter) frame colour.

Default: RGB 0.8,0.8,0.8.

ttframecol2 is the (darker) frame colour.

Default: RGB 0.7,0.7,0.7.

ttfontcolour is the frame font colour.

Default: Black.

ttlinecol1 is the colour of the outer boundary line.

Default: Black.

ttlinecol2 is the colour of the boundary line separating frame and display area.

Default: Black.

Furthermore, one may influence the shape of the output font:

\timetablefont can be redefined with something else than \sffamily.

2.1.2 Event types

Event types are nothing more than colour combinations, which are given intuitive, i.e. associative, names. After their name, red, green and blue components for the box and text are specified as values between 0 and 1, respectively:

\defineevent{lecturetype}{red}{green}{blue}{text red}{text green}{text blue}

2.2 Body

2.2.1 Heading

The heading can be inserted with the \printheading command:

```
\printheading{Text for the heading}
```

2.2.2 Left caption

There are two possibilities for the left caption. The native method is given by the

```
\timemark{1st entry}
\timemark{2nd entry}
```

macro. Each time the command is called, a new time stamp is being added to the next free line. Alternatively, the

```
\hours{Start time}{Time slot duration}{Print destination?}
```

command fills the column with entries of type "n:00" or "n:00-(n+1):00", depending on whether Print destination? is 0 or 1, respectively. n denotes hereby the start time. Just see the results displayed in Appendix A and B, they are generated by this macro. Overflows (i.e. midnight) are handled correctly.

2.2.3 Upper caption

Similarly, the top line can also be filled in two ways.

```
\daymark{1st entry}
\daymark{2nd entry}
...
is the analogon to the \timemark macro, while \englishdays{Start day}
or
```

fills the row with day names, starting at the day given as argument (where 1 denotes monday). Again, see the reference in Appendix A to see what it looks like.

2.2.4 Events

The \event macro

\germandays{Start day}

The perhaps most important macro is given by

```
\event {day number} {start time} {end time}
{name} {lecturer} {location} {type}
```

Each of these commands allocates a new event block on the specified day from start time to end time, whereby the times are given in the format '0815' for 'a quarter past 8'. The block is assigned the type identifier defining background and text colour (see 2.1.2). Note that if \hours has not been called before, start time and end time fall back to the block number, i.e. \slotevent is invoked with y = start time and duration = end time - start time.

The \slotevent macro

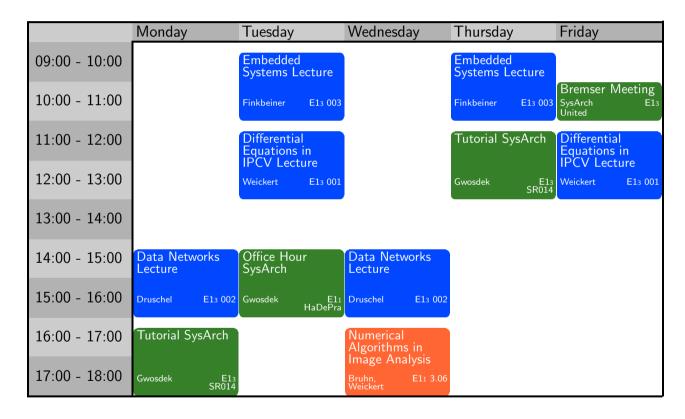
```
\slotevent {x} {y} {duration}
{name} {lecturer} {location} {type}
```

Each of these macros specifies one event block in position, duration (i.e. length in time slots), certain full text parameters and finally the type defining background and text colour (see 2.1.2).

A Sample time table (Standard Parameters)

A.1 Rendering

Time table $6^{\rm th}$ Semester



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A.2 Source code

```
\documentclass[a4paper,10pt]{report}
% Definitions
\usepackage{lscape}
\usepackage[height=25cm]{geometry}
\usepackage{timetable}
\begin{document}
\thispagestyle{empty}
\begin{landscape}
% Define the layout of your time tables
\setslotsize{2.8cm}{0.26cm}
\setslotcount {5} {36}
\settextframe{0.8mm}
% Define event types
\defineevent{corelecture}{0.0} {0.28}{1.0} {1.0}{1.0}{1.0}
\defineevent{seminar}
                         {1.0} {0.4} {0.2} {1.0}{1.0}{1.0}
\defineevent{langcourse} {1.0} {0.4} {0.2} {1.0}{1.0}{1.0}
\defineevent{tutorial}
                        {0.6} {0.8} {1.0} {1.0}{1.0}{1.0}
                         \{0.21\}\{0.5\}\ \{0.16\}\{1.0\}\{1.0\}\{1.0\}
\defineevent{work}
% Start the time table
\printheading{Time table $6^\mathsf{th}$ Semester}
\begin{timetable}
  \hours{9}{15}{1}
  \englishdays{1}
                                                                                      {E1{\tiny 3} 002}
  \event 1 {1415} {1600} {Data Networks Lecture}
                                                                   {Druschel}
                                                                                                            {corelecture}
  \event 1 {1615} {1800} {Tutorial SysArch}
                                                                                      {E1{\tiny 3} SR014}
                                                                   {Gwosdek}
                                                                                                            {work}
```

```
\event 2 {0915} {1100} {Embedded Systems Lecture}
                                                                   {Finkbeiner}
                                                                                     {E1{\tiny 3} 003}
                                                                                                            {corelecture}
  \event 2 {1115} {1300} {Differential Equations in IPCV Lecture} {Weickert}
                                                                                     {E1{\tiny 3} 001}
                                                                                                            {corelecture}
                                                                                     {E1{\tiny 1} HaDePra} {work}
  \event 2 {1415} {1600} {Office Hour SysArch}
                                                                   {Gwosdek}
                                                                                     {E1{\tiny 3} 002}
  \event 3 {1415} {1600} {Data Networks Lecture}
                                                                   {Druschel}
                                                                                                            {corelecture}
  \event 3 {1615} {1800} {Numerical Algorithms in Image Analysis} {Bruhn, Weickert} {E1{\tiny 1} 3.06}
                                                                                                            {seminar}
  \event 4 {0915} {1100} {Embedded Systems Lecture}
                                                                   {Finkbeiner}
                                                                                     {E1{\tiny 3} 003}
                                                                                                            {corelecture}
 \event 4 {1115} {1300} {Tutorial SysArch}
                                                                   {Gwosdek}
                                                                                     {E1{\tiny 3} SR014}
                                                                                                            {work}
                                                                   {SysArch United}
                                                                                     \{E1\{\langle 1, 3\}\}
  \event 5 {1000} {1100} {Bremser Meeting}
                                                                                                            {work}
 \event 5 {1115} {1300} {Differential Equations in IPCV Lecture} {Weickert}
                                                                                     {E1{\tiny 3} 001}
                                                                                                            {corelecture}
\end{timetable}
\end{landscape}
\end{document}
```

B Sample time table (Customised Variant)

B.1 Rendering

Stundenplan 6. Semester

	Montag	Dienstag	Mittwoch	Donnerstag	Freitag
09:00		09:15 - 11:00 Embedded Systems Lecture		09:15 - 11:00 Embedded Systems Lecture	
10:00		Finkbeiner E13 003		Finkbeiner E13 003	Bremser Meeting SysArch United E13
11:00		Differential Equations in		Tutorial SysArch	Differential Equations in
12:00		IPCV Lecture Weickert E13 001		Gwosdek E13 SR014	IPCV Lecture
13:00					
14:00	Data Networks Lecture	14:15 – 16:00 Office Hour SysArch	Data Networks Lecture		
15:00	Druschel E13 002		Druschel E13 002		
16:00	Tutorial SysArch		Numerical Algorithms in		
17:00	Gwosdek E13 SR014		Image Analysis Bruhn, Weickert E11 3.06		

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B.2 Source code

```
\documentclass[a4paper,10pt]{report}
% Definitions
\usepackage{lscape}
\usepackage[height=25cm]{geometry}
\usepackage{timetable}
\begin{document}
\thispagestyle{empty}
\begin{landscape}
\printheading{Stundenplan 6. Semester}
% Define the layout of your time tables
\setslotsize{2.8cm}{0.26cm}
\setslotcount {5} {36}
\settextframe{0.8mm}
\setbottomstyle{\tiny}
\setbottomspace{1pt}
\setprinttimestamps{2}
\setframetype[t]{1}
\seteventcornerradius{0pt}
\definecolor{ttframecol2}{rgb}{0.9,0.9,0.9}
% Define event types
\defineevent{corelecture}{0.0} {0.28}{1.0} {1.0}{1.0}{1.0}
                          {1.0} {0.4} {0.2} {1.0}{1.0}{1.0}
\defineevent{seminar}
\defineevent{langeourse} \{1.0\} \{0.4\} \{0.2\} \{1.0\}\{1.0\}\{1.0\}
\defineevent{tutorial} \{0.6\} \{0.8\} \{1.0\} \{1.0\} \{1.0\} \{1.0\}
\defineevent{work}
                          \{0.21\}\{0.5\}\ \{0.16\}\{1.0\}\{1.0\}\{1.0\}
```

```
% Start the time table
\begin{timetable}
  \hours{9}{15}{0}
  \germandays{1}
  \event 1 {1415} {1600} {Data Networks Lecture}
                                                                   {Druschel}
                                                                                      {E1{\tiny 3} 002}
                                                                                                             {corelecture}
  \event 1 {1615} {1800} {Tutorial SysArch}
                                                                   {Gwosdek}
                                                                                      {E1{\tiny 3} SR014}
                                                                                                            {work}
  \event 2 {0915} {1100} {Embedded Systems Lecture}
                                                                   {Finkbeiner}
                                                                                      {E1{\tiny 3} 003}
                                                                                                            {corelecture}
  \event 2 {1115} {1300} {Differential Equations in IPCV Lecture} {Weickert}
                                                                                      {E1{\tiny 3} 001}
                                                                                                             {corelecture}
  \event 2 {1415} {1600} {Office Hour SysArch}
                                                                   {Gwosdek}
                                                                                      {E1{\tiny 1} HaDePra} {work}
  \event 3 {1415} {1600} {Data Networks Lecture}
                                                                   {Druschel}
                                                                                      {E1{\tiny 3} 002}
                                                                                                             {corelecture}
  \event 3 {1615} {1800} {Numerical Algorithms in Image Analysis} {Bruhn, Weickert} {E1{\tiny 1} 3.06}
                                                                                                             {seminar}
                                                                   {Finkbeiner}
  \event 4 {0915} {1100} {Embedded Systems Lecture}
                                                                                      {E1{\tiny 3} 003}
                                                                                                             {corelecture}
  \event 4 {1115} {1300} {Tutorial SysArch}
                                                                                                            {work}
                                                                   {Gwosdek}
                                                                                      {E1{\tiny 3} SR014}
 \event 5 {1000} {1100} {Bremser Meeting}
                                                                   {SysArch United}
                                                                                      \{E1\{\langle 1, 3\}\}
                                                                                                             {work}
  \event 5 {1115} {1300} {Differential Equations in IPCV Lecture} {Weickert}
                                                                                      {E1{\tiny 3} 001}
                                                                                                             {corelecture}
\end{timetable}
\end{landscape}
\end{document}
```

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