# The litetable Class: Colorful Timetable \*

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#### 1 Introduction

The litetable class provides a design of timetable with colorful course boxes, which is based on the article class, and conducted on expl3 and tikz. It is compatible with TeXLive 2019 or later distributions, they all work fine for pdflTeX and XalteX compilers. This is the Chinese manual for the litetable class, manuals in Chinese and Cantonese versions are also provided¹.

## 2 Loading litetable and generate the timetable frame

Just like loading any class, write

```
\documentclass {litetable}
```

One can load the ctex package and set the font to input the CJK characters, if necessary.

The optional argument of the command \timelist can force the number of rows on the timetable, and that of the command \weeklist can set the default number of weeks and print it at every course box's southeast corner. Each mandatory argument of the two commands accepts an array that can add a time list to the left side of the timetable and add workdays with corresponding width ratios at the top of the timetable, respectively. The example for inputting the arrays is shown in Appendix A.

If the number of time arrays received by the command \timelist is greater than the forced number of rows, then the extra time sets are ignored, and it will return a warning. If one wants to add a series of numbers to the left side of the timetable without time, just leave the mandatory argument blank.

<sup>\*</sup>https://github.com/xiamyphys/litetable

 $<sup>^\</sup>dagger$ Lijun Guo developed modules for reading  $\langle \texttt{left} \rangle$  ->  $\langle \texttt{right} \rangle$  data structure and supporting low version TeX Live.

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```
\more \more \{\langle comment \rangle\}
```

This command can add a comment at the southwest corner of the page.

```
\maketable \maketable [\langle keyvals \rangle] \{\langle title \rangle\} [\langle keyvals \rangle]
```

This command can create a blank timetable frame, and it should execute after commands \timelist and \weeklist in the tikzpicture environment with the option of [remember picture, overaly]. The optional argument accepts keys, it can set the background color of the timetable, and add the semester at the northeast corner of the page, the default value of the key  $\Re$  color is gray. The mandatory argument can set the title.

### 3 Add course boxes

```
\verb|\course | \langle keyvals \rangle| \ \{\langle start \ number \rangle\} \ [\langle keyvals \rangle] \ \{\langle end \ number \rangle\} \ [\langle keyvals \rangle] \ | \ \{\langle end \ number \rangle\} \ [\langle end \ number \rangle\} \ | \ \{\langle end \ number
```

The \course command can add course boxes on the current workday, it should execute after command \maketable in the tikzpicture environment with the option of [remember picture, overaly].

The optional argument accepts the following keys:  $[mathbb{H}]$  color  $[mathbb{H}]$  color  $[mathbb{H}]$  color  $[mathbb{H}]$  to default value of the key  $[mathbb{H}]$  color is teal, and the default value of the key  $[mathbb{H}]$  weeks is determined by the argument of the command \weeklist. The first and second mandatory arguments are the start and end numbers of the course, respectively. The example of this command is shown in Appendix A.

- If the course box's height is only one unit, that is  $\langle start\ number \rangle = \langle end\ number \rangle$ , the values of keys  $\Re$  location and  $\Re$  teacher will print on the same line with a comma (,) separated, and the value of the key  $\Re$  weeks will be hidden.
- If neither the key <code>\mathbb{H}\ location</code> nor the key <code>\mathbb{H}\ teacher</code> is assigned value, then the value of the key <code>\mathbb{H}\ subject</code> will print at the center of the course box.
- course boxes that are out of the timetable will not display, and it will return a warning.

```
\newday \newday [\( \) intergal value \\)]
```

This command has an optional argument that can move the course boxes right \( \intergal \) value \( \) working days. The default value of the optional argument is 1 to move right 1 workday.

### A Minimal Working Example

The following MWE could generate a timetable of 13 lines but only the top 12 lines have been marked with time, and there are 5 workdays at the top of the timetable, ratios between them are 4:5:4:6:5. The default value of the key #weeks will be set to Weeks 1 - 16. A comment and two course boxes are added.

```
\documentclass{litetable}
\begin{document}
\timelist [ 13 ]
    08:05 \rightarrow 08:50, 08:55 \rightarrow 09:40, 10:00 \rightarrow 10:45, 10:50 \rightarrow 11:35,
    11:40 -> 12:25, 13:30 -> 14:15, 14:20 -> 15:05, 15:15 -> 16:00,
    16:05 -> 16:50, 18:30 -> 19:15, 19:20 -> 20:05, 20:10 -> 20:55
  }
\weeklist [ Weeks 1 - 16 ]
  {
    Mon \rightarrow 4, Tue \rightarrow 5, Wed \rightarrow 4, Thu \rightarrow 6, Fri \rightarrow 5
  }
\more { Author: Mingyu Xia \& Lijun Guo }
\begin{tikzpicture} [ remember picture, overlay ]
  \maketable
  \course [ subject = Keep on {\TeX}ing ] {10} {11}
  \course [ color = DarkSlateGray, subject = litetable,
              location = Hong Kong, teacher = M.Y. Xia
           ] {8} {8}
\end{tikzpicture}
\end{document}
```

