ElegantNoteïijŽäÿĂäÿłäijŸç¿ŐçŽĎ LᴬTᴇX çňŤèőřæÍąæİ£

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Version: 1.0

Update: October 18, 2021

1   ElegantNote Instructions

The brand new ElegantNote is redesigned on the basis of LᴬTᴇX article, a more elegant note template! You can use either pdfLᴬTᴇX or XᴇLᴬTᴇX to compile[1]. It is recommended that pdfLᴬTᴇX be used for notes in English while XᴇLᴬTᴇX be used for notes in Chinese.

The new template has the following features:

- two modes: good for eye mode (geye) and hazy mode;
- different devices: Pad (default), Screen(beamer size), Kindle, PC (double-page) and normal (A4);

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[1]The test environment is Win10 + TᴇX Live 2019.

- 5 color themes: blue (default), green, cyan, sakura and black;
- languages support: Chinese (default), English;
- support pdfLATEX and XƎLATEX;
- prettier captions, list environments, and unified fonts;
- custmized global font size: 8pt, 9pt, 10pt, 11pt, 12pt, 14pt, 17pt and 20pt;
- support for math font options for `newtx` and `mtpro2`;
- with the option of `bibstyle` (default: apalike) for changing style of bibliography;
- change the citation style with `cite` option: `authoryear`, `numbers` and `super`.

This update is to resolve TEX Live 2020 compilation errors caused by `gbt7714` compatibility issues.

1.1 Optional Modes

This template provides optional modes: good for eye mode (geye) and hazy mode, while the paper color is green for the former and light blue for the latter. you can use the following code to activate the desired mode:

```
\documentclass[geye]{elegantnote} % or
\documentclass[mode=geye]{elegantnote}
\documentclass[hazy]{elegantnote} % or
\documentclass[mode=hazy]{elegantnote}
```

Remark If you are expected to customize background, use:

```
\definecolor{geyecolor}{RGB}{199,237,204}
\pagecolor{geyecolor}
```

1.2 Device Options

To make the notes more comfortable to read, we designed four output options (of different sizes) that correspond to different reading devices: Pad (default), Kindle, PC and A4paper.

New: For the convenience of notes presentation, version 2.20 offers a new option for device, i.e. `device`=screen, which is similar to the size of MS Powerpoint with ratio aspect of 4:3 (2019/12/06).

The options of output for different devices are

```
\documentclass[device=pad]{elegantnote}    % ipad screen
    size
\documentclass[device=kindle]{elegantnote} % kindle
    screen size
\documentclass[device=pc]{elegantnote}     % double pages
     for pc
\documentclass[device=normal]{elegantnote} % a4 normal
    page
\documentclass[device=screen]{elegantnote} % 4:3 PPT size
```

Note You can also select the device by using a direct assignment method, such as:

```
\documentclass[pad]{elegantnote}
\documentclass[kindle]{elegantnote}
\documentclass[pc]{elegantnote}
\documentclass[normal]{elegantnote}
\documentclass[screen]{elegantnote}
```

Note To get a normal A4paper size PDF, please select `device`=normal.

1.3 Math Fonts

This template defines a new option (`math`), with three options:

1. `math`=cm (default), use LaTeX default math font (recommended).
2. `math`=newtx, use `newtxmath` math font (may bring about bugs).
3. `math`=mtpro2, use `mtpro2` package to set math font.

1.4 Color Themes²

This template contains 5 color themes, green, cyan, blue(default), sakura and black. If you don't need color, you can choose black theme. The color theme is enabled in the same way as before:

```
\documentclass[green]{elegantnote}
\documentclass[color=green]{elegantnote}
....
\documentclass[black]{elegantnote}
\documentclass[color=black]{elegantnote}
```

1.5 Languages

This template contains two sets of language environments, changing the language environment will change the title of table/figure (figure, table), article

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²Test for chapter footnote.

structure words (such as the table of contents, references, etc.), and the environment Introductory words (such as Theorem, Lemma, etc.). The different language modes are enabled as follows:

```
\documentclass[cn]{elegantnote}
\documentclass[lang=cn]{elegantnote}
\documentclass[en]{elegantnote}
\documentclass[lang=en]{elegantnote}
```

Note Chinese characters are allowed in Chinese mode only. To type in Chinese characters in English mode, please include `ctex`[3] or `xeCJK` package.

1.6 Theorem Class Environments

This template used the `amsthm` to create theorems, there are 4 types of theorem environments

- **Theorem-Class**: theorem, lemma, proposition, corollary;
- **Definition-Class**: definition, conjecture, example;
- **Remark-Class**: remark, note, case;
- **Proof-Class**: proof.

Remark With the option `lang=cn` , the introductory words of the theorem class environments will be changed to Chinese.

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[3]Please use `scheme=plain` to retain headlines in English.

2 Writing Sample

We will define the integral of a measurable function in three steps. First, we define the integral of a nonnegative simple function. Let E be the measurable set in $\mathcal{R}^N$.

Definition 2.1 (Left Coset) *Let H be a subgroup of a group G. A* left coset *of H in G is a subset of G that is of the form xH, where $x \in G$ and $xH = \{xh : h \in H\}$. Similarly a* right coset *of H in G is a subset of G that is of the form Hx, where $Hx = \{hx : h \in H\}$*

Note that a subgroup H of a group G is itself a left coset of H in G.

Lemma 2.1 (Size Of Left Coset) *Let H be a finite subgroup of a group G. Then each left coset of H in G has the same number of elements as H.*

Theorem 2.2 (Lagrange's Theorem) *Let G be a finite group, and let H be a subgroup of G. Then the order of H divides the order of G.*

Proof. Let z be some element of $xH \cap yH$. Then $z = xa$ for some $a \in H$, and $z = yb$ for some $b \in H$. If h is any element of H then $ah \in H$ and $a^{-1}h \in H$, since H is a subgroup of G. But $zh = x(ah)$ and $xh = z(a^{-1}h)$ for all $h \in H$. Therefore $zH \subset xH$ and $xH \subset zH$, and thus $xH = zH$. Similarly $yH = zH$, and thus $xH = yH$, as required.

Regression analysis is a powerful statistical method that allows you to examine the relationship between two or more variables of interest. While there are many types of regression analysis, at their core they all examine the influence of one or more independent variables on a dependent variable. The process of performing a

Figure 1: Matplotlib: Scatter Plot Example

regression allows you to confidently determine which factors matter most, which factors can be ignored, and how these factors influence each other.

Let's continue using our application training example. In this case, we'd want to measure the historical levels of satisfaction with the events from the past three years or so, as well as any information possible in regards to the independent variables.

Table 1: Auto MPG and Price

	(1)	(2)
mpg	-238.90***	-49.51
	(53.08)	(86.16)
weight		1.75***
		(0.641)
constant	11,253***	1,946
	(1,171)	(3,597)
obs	74	74
R^2	0.220	0.293

Standard errors in parentheses

*** $p<0.01$, ** $p<0.05$, * $p<0.1$

- Routing and resource discovery;
    - Language Models
    - Vector Space Models
- Resilient and scalable computer networks;
- Distributed storage and search.

3 Recruit Support Members

Recruit support members for ElegantLATEX to translate template official guide, maintain wiki entries, update Wechat articles. No deadline for this recruitment.

So far, ElegantLATEX has four support members:

- OG Translator: YPY;
- Wiki Maintainer: Ingo Zinngo, Xiaohao890809;
- QQ Group Manager: Sikouhjw.

Thank them all!!!

4 Acknowledgement

The number of stars on GitHub for ElegantPaper reached 176 on April 12, 2020 at the release of ElegantNote v2.20. Thank ChinaTEX and LATEX studio for their promotion.

If you like our templates, star on GitHub.

5 Donation

To express your love for our templates and/or our developers, please do not hesitate to tip us.

The explanation right of the tip usage belongs to ElegantLATEX with no

Figure 2: Twinkle, Twinkle, Little Star

supervision. Feel free to tip us. Those who donate more than 10 RMB will be recorded in the donation list and will receive a donation certificate. Thank all the tippers!

Table 2: Donation List

Tipper	Amount	Date	Channel	Tipper	Amount	Date	Channel
Lerh	10 RMB	2019/05/15	Wechat	yueguodipingxian	10 RMB	2019/05/15	Wechat
yinsang	20 RMB	2019/05/27	Wechat	*kong	10 RMB	2019/05/30	Wechat
latexstudio.net	666 RMB	2019/06/05	Alipay	A*n	40 RMB	2019/06/15	Wechat
* xia	22 RMB	2019/06/15	Wechat	* qian	21 RMB	2019/06/15	Wechat
Cassis	11 RMB	2019/06/30	Wechat	* jun	10 RMB	2019/07/23	Wechat
P*u	50 RMB	2019/07/30	Wechat	* meng	19 RMB	2019/08/28	Wechat
Qu Doudou	10 RMB	2019/08/28	Wechat	Li Bo	100 RMB	2019/10/06	Wechat
Njustsll	10 RMB	2019/10/11	Wechat	Liu Zhikuo	99.99 RMB	2019/10/15	Alipay
* tao	16 RMB	2019/10/17	Wechat	Chini	12 RMB	2019/10/17	Alipay
yuanfengjing	10 RMB	2019/10/28	Wechat	Guo Deliang	88 RMB	2019/11/03	Wechat
ziqiangbuxi	20 RMB	2019/11/04	Alipay	dushuzhichong	20 RMB	2019/11/18	Wechat
* deng	10 RMB	2019/11/18	Wechat	* zhe	20 RMB	2019/11/18	Wechat
anonymous	10 RMB	2019/11/24	Wechat	Jiye Qian	66 RMB	2019/12/04	Wechat
* yang	20 RMB	2019/12/05	Wechat	Catcher	11 RMB	2019/12/08	Alipay
xierbotementu	10 RMB	2019/12/09	Alipay	* wei	10 RMB	2019/12/09	Wechat
Simon	20 RMB	2019/12/11	Alipay	liushangqianyi	66.60 RMB	2019/12/18	Alipay
yu	10 RMB	2019/12/20	Alipay	*chen	15 RMB	2019/12/20	Wechat
suifeng	20 RMB	2019/12/27	Alipay	Ws	23.30 RMB	2019/12/28	Wechat
chuba	100 RMB	2020/01/02	Alipay	p*e	20 RMB	2020/01/03	Wechat
Shunmx	100 RMB	2020/01/03	Wechat	hj	10 RMB	2020/01/03	Wechat
F*5	10 RMB	2020/01/03	Wechat	S*m	20.20 RMB	2020/01/03	Wechat
erdaiqingzhi	13 RMB	2020/01/14	Alipay	*?	66 RMB	2020/01/15	Wechat
Mr. Xiong	20 RMB	2020/01/17	Wechat	*bo	15 RMB	2020/01/18	Wechat
*Zhe	10 RMB	2020/02/02	Wechat	Jackie	88.80 RMB	2020/02/09	Wechat
Henry_Sun	50 RMB	2020/02/14	Alipay	* Qiao	50 RMB	2020/02/21	Wechat
YunLian	10 RMB	2020/03/02	Alipay	S*y	10 RMB	2020/03/15	Wechat
* Ge	66.66 RMB	2020/03/17	Wechat	K*e	30 RMB	2020/03/30	Wechat
* Yang	20 RMB	2020/04/02	Wechat	Shi*n	30 RMB	2020/04/11	Wechat

6 FAQ

1). *How to remove the information of version?*
   Please comment `\version{x.xx}`.

2). *How to remove the information of date?*
   Please type in `\date{}`.

3). *How to add several authors?*
   Use `\and` in `\author` and use `\\` to start a new line.

   ```
   \author{author 1\\ org. 1 \and author 2 \\ org. 2 }
   ```