ElegantCS: An ElegantPaper Fork focus on Computer Science

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0.10

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This documentation illustrates the usage of the ElegantCS template. This template is based on the standard ElegantPaper article class, which is designed for working paper writing. With this template, you can get rid of all the worries about the format and merely focus on writing. For any question, please leave a message on

GitHub::ElegantCS/issues.

: ElegantLATEX, Working Paper, Template

Features added to ElegantPaper

Code Block Style

Predefined code style for all languages supported by Istlisting

Code from a file: **Cpp**:

```
#include <bits/stdc++.h>
using namespace std;

int main() {
    // hello
    ios::sync_with_stdio(false); cin.tie(nullptr);
    cout << "Hello World!" << endl;
}</pre>
```

Code in latex document: **Java**(with caption version):

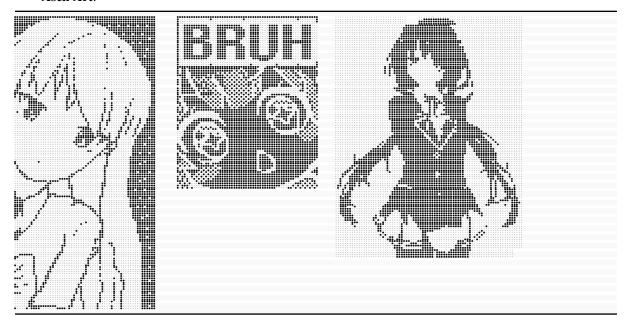
Showcase.java

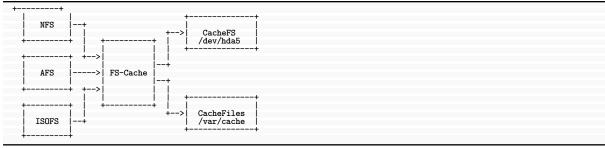
```
class Showcase
{
    public static void main(String[] args)
    {
        System.out.println("hello world!");
}
```

```
6 }
7 }
```

Also, the print("inline code") example.

Ascii Art:





Highlight Box

highlight box example

Update Notes

This version changes two important parts: fonts and bibliography.

Fonts: Due to the newtx package updates, we change the font settings for all the templates of ElegantLaTeX. Under XqLATeX, we use fontspec package to set the font to TeX Gyre Terms/Heros.

Bibliography: The bib file is no longer wpref.bib, it's same with ElegantBook bibfile, reference.bib. Besides, we use biblatex/biber rather than bibtex to handler bibliography, you can use bibstyle and citestyle to set the styles. For convenience, we offer a bibend option, which can take values of biber (default) and bibtex, please refer to Bibliography section and biblatex package document for more information.

1 Introduction

This template is based on the standard LaTeX article class, hence the arguments of article class are acceptable (a4paper, 10pt and etc.). Alternative engines are pdfLaTeX and XeLaTeX.

\documentclass[a4paper,11pt]{elegantpaper}

Note: ElegantPaper is available on Overleaf and gitee.

1.1 Global Options

Language mode option lang allows two alternative inputs, lang=en (default) for English or lang=cn for Chinese. lang=cn will make the caption of figure/table, abstract name, refname etc. Chinese. You can use this option as

- 1 \documentclass[lang=cn] {elegantpaper} % or
- 2 \documentclass[cn] {elegantpaper}

Note: Under the English mode lang=en, Chinese characters are not allowed. To type in Chinese, please load ctex or xeCJK package at the preamble as:

\usepackage[UTF8,scheme=plain]{ctex}

1.2 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.

1.3 Custom Commands

Default LATEX commands and environments are all the same in this template¹. We created four new commands:

- 1. \email: create the hyperlink to email address.
- 2. \figref: same usage as \ref, but start with label text Figure n.
- 3. \tabref: same usage as \ref, but start with label text **Table n**.
- 4. \keywords: create the keywords in the abstract section.

1.4 Bibliography

This template uses biblatex to generate the bibliography, the default citestyle and bibliography style are both numeric. Let's take a glance at the citation effect. [en1] use data from a major peer-to-peer lending [en3] market-place in China to study whether female and male investors evaluate loan performance differently [en2].

If you want to use biblatex, you must create a file named reference.bib, add bib items (from Google Scholar, Mendeley, EndNote, and etc.) to reference.bib file, then cite the bibkey in the tex file. The biber will automatically generate the bibliography for the reference you cited.

¹To ensure the codes are replicatable. We recommend users pay more attention to the contents other than formats. This is the meaning of the existence of the template.

To change the bibliography style, this version introduces two options: citestyle and bibstyle, please refer to CTAN:biblatex for more detail about these options. You can change your bibliography style as

\documentclass[citestyle=numeric-comp, bibstyle=authoryear]{elegantpaper}

We also add the bibend option to this template, you can choose biber (default) or bibtex as you like, biber is recommended.

- 1 \documentclass[bibtex]{elegantpaper} % or
- 2 \documentclass[bibend=bibtex] {elegantpaper}

1.5 Use newtx fonts

If you use newtx fonts, you can use the math option as

\documentclass[math=newtx] {elegantpaper}

1.5.1 Hyphens

Since the template uses newtx, please pay attention to the hyphens. For instance,

$$\int_{R^q} f(x, y) dy. off \tag{1}$$

The corresponding code is:

- 1 \begin{equation}
- 2 \int_{R^q} f(x,y) dy.\emph{of \kernOpt f}
- 3 \end{equation}

1.5.2 Symbol Fonts

Feedback from ElegantBook users claims that error occurs when using our templates with yhmath, esvect and other packages.

- 1 LaTeX Error:
- 2 Too many symbol fonts declared.

The reason is that the template redefines font for math so that no new math font is allowed to be added. To use yhmath and/or esvect, please locate yhmath or esvect in elegantpaper.cls, uncomment corresponding related code.

2 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.

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

4). How to display bilingual abstracts?

Please refer to GitHub::ElegantPaper/issues/5

3 Acknowledgement

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