ElegantCS: An ElegantPaper Fork focus on Computer Science

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ElegantLATEX Program

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Abstract

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.

Keywords: ElegantLATEX, Working Paper, Template

Features added to ElegantPaper

Code Block Style

Predefined code style for all languages supported by *listings*

Code from a file: **Cpp**:

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

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

Code in latex document: **Java**(with caption version):
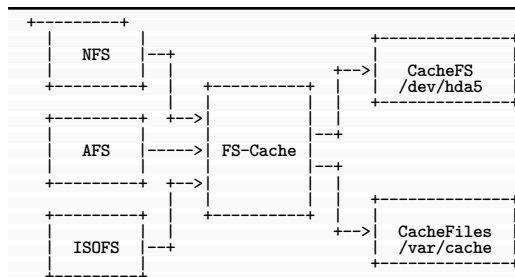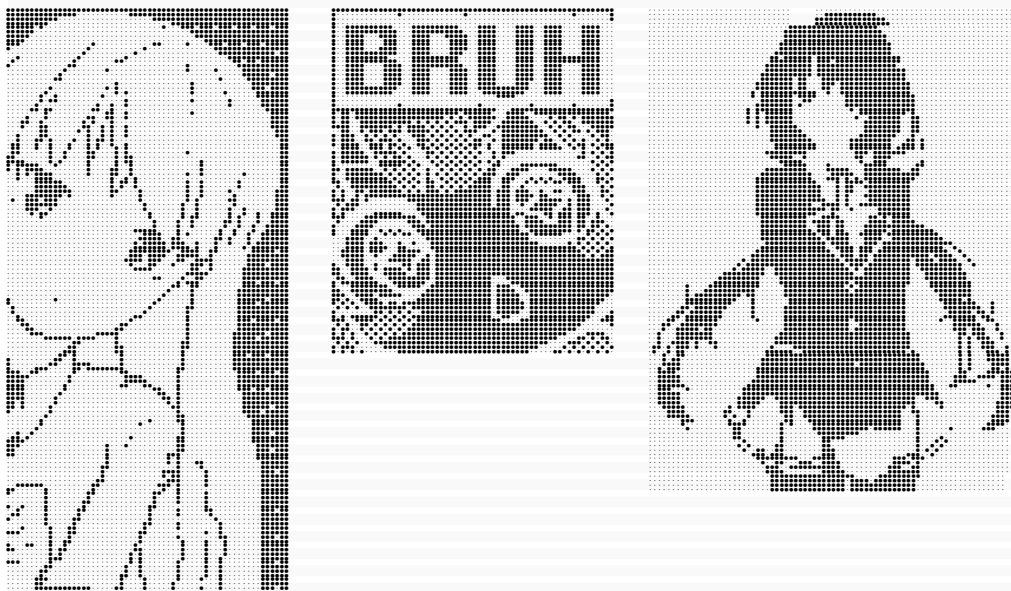
```java
Showcase.java
class Showcase
{
  public static void main(String[] args)
  {
    System.out.println("hello world!");
```

```
6     }
7  }
```

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

Ascii Art:


```
+---------+
|   NFS   |--+                   +-------------+
+---------+  |              +--> |   CacheFS   |
             |              |    |  /dev/hda5  |
+---------+  |  +---------+ |    +-------------+
|   AFS   |  +--> |       |--+
+---------+  ----->| FS-Cache |
|   AFS   |----->| FS-Cache |--+
+---------+  +--> |       |--+
             |  +---------+ |    +-------------+
+---------+  |              +--> |  CacheFiles |
|  ISOFS  |--+                   |  /var/cache |
+---------+                      +-------------+
```

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 X͟ELͣ͟A͟TEX, 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 X⅃LaTeX.

```
1  \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:

```
1  \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 template[1]. 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**] marketplace 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.

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[1]To 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

```
1  \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

```
1  \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 \kern0pt 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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