A Translation Template for Huazhong University of Science and Technology: the husttrans class *

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*This document corresponds to husttrans.cls v1.1, dated 2016/06/01.

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I Introduction

This is a translation template for Huazhong University of Science & Technology. This template is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

The whole project is published under LPPL v1.3 License at GitHub.

II 使用说明

1 使用必要条件

1. 安装最新版本的 TeXLive（推荐）或 MiKTeX。因为未及时更新的宏包可能存在未修复的 bug，请确保所有宏包都更新至最新。
2. 安装如下中文字体[1]：
   a) AdobeSongStd-Light
   b) AdobeKaitiStd-Regular
   c) AdobeHeitiStd-Regular
   d) AdobeFangsongStd-Regular

如果使用 LuaTeX，安装字体之后需运行命令 `mkluatexfontdb` 生成字体索引。

2 安装

2.1 安装到本地

使用如下命令即可安装本模板到本地：

```
make install
```

如需卸载，则使用如下命令：

```
make uninstall
```

对于没有安装 Make 的 Windows 系统用户，可以使用如下命令安装：

```
makewin32.bat install
```

如需卸载，则使用如下命令：

```
makewin32.bat uninstall
```

虽然 `makewin32.bat` 表现与 `Makefile` 极其相似，但是还是强烈建议你安装 Make，对于 Windows 用户可以在这里下载。

[1] 本模板所用到的英文字体 Tex Gyre Termes，Droid Sans 和 CMU Typewriter Text 均默认安装于 TeXLive 和 MiKTeX 中。

2.2 免安装使用

如果你希望临时使用本模板，而非安装到本地供长期使用。使用如下命令解压模板文件：

```
make unpack
```

对于没有安装 Make 的 Windows 系统用户，则使用如下命令解压：

```
makewin32.bat unpack
```

再将 husttrans 目录下的如下文件拷贝到你 TEX 工程根目录下即可：

- husttrans.cls

3 基本用法

本文档只能使用 XeLaTeX 或 LuaLaTeX（推荐）编译。

在源文件开头处选择加载本文档类型，即可使用本模板，如下所示：

```
\documentclass{husttrans}
```

3.1 基本字段设置

模板中定义一些命令用于设置文档中的字段。

`\title` `\title{⟨translation title⟩}`

该命令用于设定外文翻译的标题。

`\author` `\author{⟨Orignial author⟩}`

该命令用于设定原文作者。

`\translator` `\translator{⟨Translator⟩}`

该命令用于设定翻译作者。

`\date` `\date{⟨Year⟩}{⟨Month⟩}{⟨Day⟩}`

该命令用于设定日期。如果不设定，则会选择当前编译日期。

`\supervisor` `\supervisor{⟨supervisor⟩}`

该命令用于设定指导老师名（含职称）。

3.2 其它基本命令

下面来介绍其它基本命令。

`\frontmatter` `\mainmatter` `\backmatter`

这一组命令用于设定译文的状态、改变样式，其具体使用见简单示例。`\frontmatter` 用在文档最开始，表明文档的前言部分（如封面，目录等）的开始。`\mainmatter` 表示译文正文的开始。`\backmatter` 表示译文正文的结束。

`\maketitle` `\makecover`

`\maketitle` 和`\makecover` 作用相同，用于生成封面。

`\tableofcontents`

用于生成目录。

`\dateformat`

用于打印日期。

`\bibliography`

`\bibliography{⟨.bib file⟩}`

用于生成参考文献。

`appendix`

`appendix` 环境用于附录环境。你可以将附录置于 `appendix` 环境中，如：

```
\begin{appendix}
    <content>
\end{appendix}
```

`\appendix`

或者使用`\appendix` 代表后文均为附录，如：

```
\appendix
<content>
```

`\listoffigures` `\listoftables`

这两个命令分别用于生成图片和表格索引，可以根据要求在前言中或附录中使用。

\TurnOffTabFontSetting
\TurnOnTabFontSetting

因为模板中设定了表格的行距和字号，使得使用中无法临时自定义表格的行距和字号。故提供两个命令用于关闭和开启默认表格的行距和字号设置。比如你如果需要输出一个自己定义字号的表格，可以使用如下示例：

```
\begingroup
\TurnOffTabFontSetting
\footnotesize % 设置字号
\begin{tabular}{...}
    <content>
\end{tabular}
\TurnOnTabFontSetting
\endgroup
```

\email `\email{⟨Email Address⟩}`

用于生成邮箱地址。如`\email{name@example.com}`会生成如下效果的地址：name@example.com 。

4 简单示例

如下为一个使用本模板的简单示例。更完整的例子请见`husttrans-example.tex`文件，其效果见 husttrans-example.pdf。

```
\documentlcass{husttrans}
\title{原 文 标 题}
\author{原 文 作 者}
\translator{翻 译 作 者}
\supervisor{指 导 老 师}
\date{2014}{3}{1}

\begin{document}

\frontmatter
\maketitle
\tableofcontents
\listoffigures
\listoftables
\mainmatter

%% 正 文

\backmatter
```

```
\bibliography{参考文献.bib文件}
\appendix
%% 附录剩余部分
\end{document}
```

5 预设宏包介绍

本模板中预设了一些宏包，下面对其进行简单介绍。

- algorithm2e 算法环境。
- enumitem 自定义列表环境的式样。
- fancynum 用于将大数每三位断开。
- listings 代码环境。如需更好的代码高亮可以使用 minted 宏包。
- longtable 跨页的超长表格环境。
- ltxtable longtable 环境和 tabularx 环境的合并。
- multirow 用于表格中合并行。
- overpic 用于在图片上层叠其他内容。
- tabularx 扩展到表格环境。
- zhnumber 用于生成中文数字。

6 高级设置

6.1 切换字体

模板正文字体为宋体（AdobeSongStd-Light），同时我们提供如下命令切换中文字体：

`\HEI` `{\HEI ⟨content⟩}`
`\hei` `\hei{⟨content⟩}`
切换字体为黑体（AdobeHeitiStd-Regular）。

`\KAI` `{\KAI ⟨content⟩}`
`\kai` `\kai{⟨content⟩}`
切换字体为楷体（AdobeKaitiStd-Regular）。

`\FANGSONG` `{\FANGSONG ⟨content⟩}`
`\fangsong` `\fangsong{⟨content⟩}`
切换字体为仿宋（AdobeFangsongStd-Regular）。

如果需要加载其他字体，请参阅宏包 fontspec，宏包 xeCJK（对于 XeLaTeX）和宏包 luatex-ja（对于 LuaLaTeX）的文档。

6.2 内部字段设置

本模板定义了内部字段，其具体内容见 section 7。通过更改这些字段，可以对格式进行自定义。

III Implementation

```
%<*class>
\RequirePackage{ifthen}
```

1 Process Options

Use xkeyval to process options.

```
\RequirePackage{xkeyval}
```

Process options and load class book.

```
\DeclareOption*{\PassOptionsToClass{\CurrentOption}{book}}
\ProcessOptionsX
\LoadClass[12pt, a4paper, openany]{book}
```

2 Check Engine

Check engine, only XeLaTeX and LuaLaTeX are supported.

```
\RequirePackage{iftex}
\ifXeTeX\else
  \ifLuaTeX\else
    \begingroup
      \errorcontextlines=-1\relax
      \newlinechar=10\relax
      \errmessage{^^J
      ************************************************************^^J
      * XeTeX or LuaTeX is required to compile this document.^^J
      * Sorry!^^J
      ************************************************************^^J
      }%
    \endgroup
  \fi
\fi
```

3 Font Setting

Set font used in document. Firstly, it's English font. We use fontspec package to handle font. We choose Tex Gyre Termes, Droid Sans and CMU

Typewriter Text as document main font, sans font and mono font.

Then it's the Chinese font setting. We use xecjk package (for XeLaTeX) or luatex-ja package (for LuaLaTeX, recommend) to handle Chinese font. We will use font: AdobeSongStd-Light, AdobeKaitiStd-Regular, AdobeHeitiStd-Regular and AdobeFangsongStd-Regular.

```
\ifXeTeX  % XeTeX 下使用 fontspec + xeCJK 处理字体
  % 英文字体
  \RequirePackage{fontspec}
  \RequirePackage{xunicode}
  \setmainfont[
    Ligatures={Common,TeX},
    Extension=.otf,
    UprightFont=*-regular,
    BoldFont=*-bold,
    ItalicFont=*-italic,
    BoldItalicFont=*-bolditalic]{texgyretermes}
  \setsansfont[Ligatures={Common,TeX}]{Droid Sans}
  \setmonofont{CMU Typewriter Text}
  \defaultfontfeatures{Mapping=tex-text}
  % 中文字体
  \RequirePackage[CJKmath]{xeCJK}
  \setCJKmainfont[
   BoldFont={Adobe Heiti Std},
   ItalicFont={Adobe Kaiti Std}]{Adobe Song Std}
  \setCJKsansfont{Adobe Kaiti Std}
  \setCJKmonofont{Adobe Fangsong Std}
  \xeCJKsetup{PunctStyle=kaiming}

  \newcommand\ziju[2]{{\renewcommand{\CJKglue}{\hskip #1} #2}}
```

\HEI

```
  \newCJKfontfamily\HEI{Adobe Heiti Std}
```

(*End definition for* \HEI. *This function is documented on page* 8.)

\KAI

```
  \newCJKfontfamily\KAI{Adobe Kaiti Std}
```

(*End definition for* \KAI. *This function is documented on page* 8.)

\FANGSONG

```
  \newCJKfontfamily\FANGSONG{Adobe Fangsong Std}
```

(*End definition for* `\FANGSONG`. *This function is documented on page* 8.)

`\hei`

```
\newcommand{\hei}[1]{{\HEI #1}}
```

(*End definition for* `\hei`. *This function is documented on page* 8.)

`\kai`

```
\newcommand{\kai}[1]{{\KAI #1}}
```

(*End definition for* `\kai`. *This function is documented on page* 8.)

`\fangsong`

```
\newcommand{\fangsong}[1]{{\FANGSONG #1}}
```

(*End definition for* `\fangsong`. *This function is documented on page* 8.)

```
\else\fi
\ifLuaTeX  % LuaTeX 下使用 luatex-ja 处理字体 [推荐]
  \RequirePackage{luatexja-fontspec}
  % 英文字体
  \setmainfont[Ligatures={Common,TeX}]{Tex Gyre Termes}
  \setsansfont[Ligatures={Common,TeX}]{Droid Sans}
  \setmonofont{CMU Typewriter Text}
  \defaultfontfeatures{Mapping=tex-text,Scale=MatchLowercase}
  % 中文字体
  \setmainjfont[
   BoldFont={AdobeHeitiStd-Regular},
   ItalicFont={AdobeKaitiStd-Regular}]{AdobeSongStd-Light}
  \setsansjfont{AdobeKaitiStd-Regular}
  \defaultjfontfeatures{JFM=kaiming}

  \newcommand\ziju[2]{\vbox{\ltjsetparameter{kanjiskip=#1} #2}}
```

`\HEI`

```
\newjfontfamily\HEI{AdobeHeitiStd-Regular}
```

(*End definition for* `\HEI`. *This function is documented on page* 8.)

`\KAI`

```
\newjfontfamily\KAI{AdobeKaitiStd-Regular}
```

(*End definition for* `\KAI`. *This function is documented on page* 8.)

`\FANGSONG`

```
\newjfontfamily\FANGSONG{AdobeFangsongStd-Regular}
```

(*End definition for* `\FANGSONG`. *This function is documented on page* 8.)

`\hei`

```
\newcommand{\hei}[1]{{\jfontspec{AdobeHeitiStd-Regular} #1}}
```

(*End definition for* `\hei`. *This function is documented on page* 8.)

`\kai`

```
\newcommand{\kai}[1]{{\jfontspec{AdobeKaitiStd-Regular} #1}}
```

(*End definition for* `\kai`. *This function is documented on page* 8.)

`\fangsong`

```
\newcommand{\fangsong}[1]{{\jfontspec{AdobeFangsongStd-Regular} #1}}
```

(*End definition for* `\fangsong`. *This function is documented on page* 8.)

```
\else\fi
```

Generate Chinese number using zhnumber.

```
\RequirePackage{zhnumber}
\def\CJKnumber#1{\zhnumber{#1}} % 兼容 CJKnumb
```

4 Basic Format

We set global line spread to 1.3.

```
\linespread{1.3}\selectfont
```

Use geometry package to handle paper page.

```
\RequirePackage{geometry}
\geometry{
  top=1.2in,
  bottom=1.2in,
  left=1in,
  right=1in,
  includefoot
}
\pagewidth=\paperwidth
\pageheight=\paperheight
```

Indent of paragraph and skip between paragraphs.

```
\RequirePackage{indentfirst}
\setlength{\parindent}{2em}
\setlength{\parskip}{0pt plus 2pt minus 1pt}
```

Packages to handle color.

```
\RequirePackage{color}
\RequirePackage[table]{xcolor}
```

Use hyperref package to generate cross-reference link.

```
\RequirePackage[unicode]{hyperref}
\hypersetup{
  bookmarksnumbered=true,
  bookmarksopen=true,
  bookmarksopenlevel=1,
  breaklinks=true,
  colorlinks=true,
  allcolors=black,
  linktoc=all,
  plainpages=false,
  pdfpagelabels=true,
  pdfstartview={XYZ null null 1},
  pdfinfo={Template.Info={husttrans.cls v1.0 2014/03/01, Copyright (C) 2013-2014 by
}
```

5 Load Packages

Load packages for math.

```
\RequirePackage{amsmath,amssymb,amsfonts}
\RequirePackage[amsmath,amsthm,thmmarks,hyperref,thref]{ntheorem}
\RequirePackage{fancynum}
\setfnumgsym{\,}
\RequirePackage[lined,boxed,linesnumbered,ruled,vlined,algochapter]{algorithm2e}
```

Load packages for picture.

```
\RequirePackage{overpic}
\RequirePackage{graphicx,caption,subcaption}
```

Load packages for table.

```
\RequirePackage{array}
\RequirePackage{multirow,tabularx,ltxtable}
```

Load package for code highlight. Here we use listings to highlight the code. But if you need more features, use minted.

```
\RequirePackage{listings}
```

Load package for bibliography cite style.

```
\RequirePackage[numbers,square,comma,super,sort&compress]{natbib}
```

Other packages for style setting.

```
\RequirePackage{titlesec}
\RequirePackage{titletoc}
\RequirePackage{tocvsec2}
\RequirePackage[inline]{enumitem}
\RequirePackage{fancyhdr}
\RequirePackage{afterpage}
\RequirePackage{datenumber}
\RequirePackage{etoolbox}
\RequirePackage{appendix}
\RequirePackage[titles]{tocloft}
\RequirePackage{xstring}
\RequirePackage{perpage}
```

6 Variables Setting

`\title` Commands to set the title.

```
\def\title#1{\gdef\HUST@zhtitle{#1}\hypersetup{pdftitle={#1}}}
\title{}
```

(*End definition for* `\title`*. This function is documented on page 5.*)

`\author` Commands to set the author.

```
\def\author#1{\gdef\HUST@zhauthor{#1}}
\author{}
```

(*End definition for* `\author`*. This function is documented on page 5.*)

`\translator` Commands to set the translator.

```
\def\translator#1{\gdef\HUST@zhtranslator{#1}\hypersetup{pdfauthor={#1}}}
\translator{}
```

(*End definition for* `\translator`*. This function is documented on page 5.*)

`\date` A command to set the date and several commands to display date.

`\dateformat`

```
\def\date#1#2#3{
  \setdate{#1}{#2}{#3}
}
\setdatetoday
\def\dateformat{~\thedateyear~年~\thedatemonth~月~\thedateday~日}
```

(*End definition for* `\date` *and* `\dateformat`*. These functions are documented on page 5.*)

\supervisor Commands to set the supervisor.

```
\def\supervisor#1{\gdef\HUST@zhsupervisor{#1}}
\supervisor{}
```

(*End definition for* `\supervisor`. *This function is documented on page* 5.)

7 Localization

Chinese localization. [2]

```
\def\indexname{索引}
\def\figurename{图}
\def\tablename{表}
\AtBeginDocument{\def\listingscaption{代码}}
\def\bibname{参考文献}
\def\contentsname{目\hspace{1em}录}
\def\contentsnamenospace{目录}
\def\appendixname{附录}
\def\HUST@listfigurename{插图索引}
\def\HUST@listtablename{表格索引}
\def\equationautorefname{公式}
\def\footnoteautorefname{脚注}
\def\itemautorefname~#1\null{第~#1~项\null}
\def\figureautorefname{图}
\def\tableautorefname{表}
\def\appendixautorefname{附录}
\expandafter\def\csname\appendixname autorefname\endcsname{\appendixname}
\def\chapterautorefname~#1\null{第\zhnumber{#1}章\null}
\def\sectionautorefname~#1\null{#1~小节\null}
\def\subsectionautorefname~#1\null{#1~小节\null}
\def\subsubsectionautorefname~#1\null{#1~小节\null}
\def\FancyVerbLineautorefname~#1\null{第~#1~行\null}
\def\pageautorefname~#1\null{第~#1~页\null}
\def\lstlistingautorefname{代码}
\def\definitionautorefname{定义}
\def\propositionautorefname{命题}
\def\lemmaautorefname{引理}
\def\theoremautorefname{定理}
\def\axiomautorefname{公理}
\def\corollaryautorefname{推论}
```

[2] The `autorefname` Reference:http://tex.stackexchange.com/questions/52410/how-to-use-the-command-autoref-to-implement-the-same-effect-when-use-the-comman

```
\def\exerciseautorefname{练习}
\def\exampleautorefname{例}
\def\proofautorefname{证明}
\SetAlgorithmName{算法}{算法}{算法索引}
\SetAlgoProcName{过程}{过程}
\SetAlgoFuncName{函数}{函数}
\def\AlgoLineautorefname~#1\null{第~#1~行\null}
```

Internal variables.

```
\long\def\HUST@zhtitletitle{华中科技大学\\毕业设计（论文）\\[0.8cm] 外文文献翻译}
\def\HUST@zhauthortitle{原文作者}
\def\HUST@zhtranslatortitle{翻译作者}
\def\HUST@zhsupervisortitle{指导教师}
```

Set `\listfigurename` and `\listtablename`.

```
\def\listfigurename{\HUST@listfigurename}
\def\listtablename{\HUST@listtablename}
```

8 Style Setting

8.1 Equation Style

Allow long equation breaking between lines or pages.

```
\allowdisplaybreaks[4]
```

Set skip between equation and context.

```
\abovedisplayskip=10bp plus 2bp minus 2bp
\abovedisplayshortskip=10bp plus 2bp minus 2bp
\belowdisplayskip=\abovedisplayskip
\belowdisplayshortskip=\abovedisplayshortskip
```

Set equation numbering style.

```
\numberwithin{equation}{chapter}
```

8.2 Theorem Style

We use amsthm to handle the proof environment and use ntheorem to handle other theorem environments.

```
\theoremnumbering{arabic}
\theoremseparator{: }
\theorempreskip{1.2ex plus 0ex minus 1ex}
\theorempostskip{1.2ex plus 0ex minus 1ex}
```

```
\theoremheaderfont{\normalfont\bfseries\HEI}
\theoremsymbol{}

\theoremstyle{definition}
\theorembodyfont{\normalfont}
\newtheorem{definition}{定义}[chapter]

\theoremstyle{plain}
\theorembodyfont{\itshape}
\newtheorem{proposition}{命题}[chapter]
\newtheorem{lemma}{引理}[chapter]
\newtheorem{theorem}{定理}[chapter]
\newtheorem{axiom}{公理}[chapter]
\newtheorem{corollary}{推论}[chapter]
\newtheorem{exercise}{练习}[chapter]
\newtheorem{example}{例}[chapter]
\def\proofname{\hei{证明}}
```

8.3 Floating Objects Style

Set the skip to the context for floating object with argument 'h'.

```
\setlength{\intextsep}{0.7\baselineskip plus 0.1\baselineskip minus 0.1\baselineskip
```

Set the skip to the context for top or bottom floating object.

```
\setlength{\textfloatsep}{0.8\baselineskip plus 0.1\baselineskip minus 0.2\baselineskip}
```

Set the fraction of floating object. Make the fraction less crowded than default value to prevent floating object occupying too much space.

```
\renewcommand{\textfraction}{0.15}
\renewcommand{\topfraction}{0.85}
\renewcommand{\bottomfraction}{0.65}
\renewcommand{\floatpagefraction}{0.60}
```

8.4 Table Style

`\tabincell` A command make it easier to insert a new table into an existing cell.

```
\newcommand{\tabincell}[2]{\begin{tabular}{@{}#1@{}}#2\end{tabular}}
```

(*End definition for* `\tabincell`*. This function is documented on page* **??**.)

To prevent \cline breaking page in longtable environment, use in this way: ⟨*table content*⟩ * \nopagebreak \cline{i-j} [3]

```
\def\@cline#1-#2\@nil{%
  \omit
  \@multicnt#1%
  \advance\@multispan\m@ne
  \ifnum\@multicnt=\@ne\@firstofone{&\omit}\fi
  \@multicnt#2%
  \advance\@multicnt-#1%
  \advance\@multispan\@ne
  \leaders\hrule\@height\arrayrulewidth\hfill
  \cr
  \noalign{\nobreak\vskip-\arrayrulewidth}}
```

Here we set the global font setting (font size: 11pt and line spread: 1.4) for tables. But first we will declare a variable to determine whether table global font setting is activated.

```
\newif\ifHUST@useoldtabular
\HUST@useoldtabularfalse
```

nOffTabFontSetting Use \TurnOffTabFontSetting to deactivate global font setting.

```
\def\TurnOffTabFontSetting{\HUST@useoldtabulartrue}
```

(*End definition for* \TurnOffTabFontSetting*. This function is documented on page 7.*)

rnOnTabFontSetting Use \TurnOnTabFontSetting to activate global font setting.

```
\def\TurnOnTabFontSetting{\HUST@useoldtabularfalse}
```

(*End definition for* \TurnOnTabFontSetting*. This function is documented on page 7.*)

Hook the tabular, tabularx and longtable environment to imply the global font setting.

```
\AtBeginEnvironment{tabular}{
  \ifHUST@useoldtabular\else
    \fontsize{11pt}{15.4pt}\selectfont
  \fi
}
\AtBeginEnvironment{tabularx}{
  \ifHUST@useoldtabular\else
    \fontsize{11pt}{15.4pt}\selectfont
  \fi
```

[3] Reference:http://tex.stackexchange.com/questions/52100/longtable-multirow-problem-with-cline-and-nopagebreak

```
}
\AtBeginEnvironment{longtable}{
  \ifHUST@useoldtabular\else
    \fontsize{11pt}{15.4pt}\selectfont
  \fi
}
```

8.5 Caption Style

Set caption font size as 11pt, use hang format, remove ':' after number and set the skip between context as 12pt.

```
\DeclareCaptionFont{HUST@captionfont}{\fontsize{11pt}{14.3pt}\selectfont}
\DeclareCaptionLabelFormat{HUST@caplabel}{#1~#2}
\captionsetup{
  font=HUST@captionfont,
  labelformat=HUST@caplabel,
  format=hang,
  labelsep=quad,
  skip=12pt
}
```

Set figure and table numbering style.

```
\renewcommand{\thetable}{\arabic{chapter}.\arabic{table}}
\renewcommand{\thefigure}{\arabic{chapter}-\arabic{figure}}
```

8.6 Code Highlight Style

```
\definecolor{HUST@lstgreen}{rgb}{0,0.6,0}
\definecolor{HUST@lstmauve}{rgb}{0.58,0,0.82}

\lstset{
  basicstyle=\footnotesize\ttfamily\linespread{1}\selectfont\FANGSONG,
  keywordstyle=\color{blue}\bfseries,
  commentstyle=\color{HUST@lstgreen}\itshape\KAI,
  stringstyle=\color{HUST@lstmauve},
  showspaces=false,
  showstringspaces=false,
  showtabs=false,
  numbers=left,
  numberstyle=\tiny\color{black},
  frame=lines,
  rulecolor=\color{black},
```

```
  breaklines=true
}
```

8.7 Section Title Style

Set the numbering depth for section.

```
\setcounter{secnumdepth}{3}
```

Chapter tilte format and spacing setting.

```
\titleformat{\chapter}
  {
    \bfseries
    \HEI
    \centering
    \fontsize{18pt}{23.4pt}\selectfont
  }
  {
    \zhnumber{\thechapter}
  }
  {1em}
  {}
\titlespacing*{\chapter}{0pt}{0pt}{20pt}
```

Section tilte format and spacing setting.

```
\titleformat*{\section}{\bfseries\HEI\fontsize{16pt}{20.8pt}\selectfont}
\titlespacing*{\section}{0pt}{18pt}{6pt}
```

Subsection tilte format and spacing setting.

```
\titleformat*{\subsection}{\bfseries\HEI\fontsize{14pt}{18.2pt}\selectfont}
\titlespacing*{\subsection}{0pt}{12pt}{6pt}
```

Subsubsection tilte format and spacing setting.

```
\titleformat*{\subsubsection}{\bfseries\HEI\fontsize{13pt}{16.9pt}\selectfont}
\titlespacing*{\subsubsection}{0pt}{12pt}{6pt}
```

8.8 TOC Style

TOC depth.

```
\setcounter{tocdepth}{1}
```

TOC right margin.

```
\contentsmargin{2.0em}
```

Remove vertical space between two continues chapter entries. [4]

```
\newskip\HUST@oldcftbeforechapskip
\HUST@oldcftbeforechapskip=\cftbeforechapskip
\newskip\HUST@oldcftbeforesecskip
\HUST@oldcftbeforesecskip=\cftbeforesecskip
\let\HUST@oldl@chapter\l@chapter
\let\HUST@oldl@section\l@section
\let\HUST@oldl@subsection\l@subsection
\def\l@chapter#1#2{\HUST@oldl@chapter{#1}{#2}\cftbeforechapskip=3pt}
\def\l@section#1#2{\HUST@oldl@section{#1}{#2}\cftbeforechapskip=\HUST@oldcftbeforech
\def\l@subsection#1#2{\HUST@oldl@subsection{#1}{#2}\cftbeforesecskip=\HUST@oldcftbef
```

Set LOF LOT style. [5]

```
\renewcommand*\cftfigpresnum{\figurename~}
\newlength{\HUST@cftfignumwidth@tmp}
\settowidth{\HUST@cftfignumwidth@tmp}{\cftfigpresnum}
\addtolength{\cftfignumwidth}{\HUST@cftfignumwidth@tmp}
\renewcommand{\cftfigaftersnumb}{\quad~}
\renewcommand*\cfttabpresnum{\tablename~}
\newlength{\HUST@cfttabnumwidth@tmp}
\settowidth{\HUST@cfttabnumwidth@tmp}{\cfttabpresnum}
\addtolength{\cfttabnumwidth}{\HUST@cfttabnumwidth@tmp}
\renewcommand{\cfttabaftersnumb}{\quad~}
```

8.9 Head & Foot Style

```
\pagestyle{empty}
```

8.10 List Environment Style

```
\setlist{noitemsep,partopsep=0pt,topsep=.8ex}
\setlist[1]{labelindent=\parindent}
\setlist[enumerate,1]{label=\arabic*.,ref=\arabic*}
\setlist[enumerate,2]{label*=\arabic*,ref=\theenumi.\arabic*}
\setlist[enumerate,3]{label=\emph{\alph*}),ref=\theenumii\emph{\alph*}}
\setlist[description]{font=\bfseries\HEI}
```

8.11 Footnote Style

```
\MakePerPage{footnote}
```

[4] Reference:http://tex.stackexchange.com/questions/89103/remove-vertical-space-between-two-chapters-in-table-of-contents-in-latex

[5] Reference:http://www.latex-community.org/viewtopic.php?f=5&t=1838

9 Specical Page

\frontmatter
\mainmatter
\backmatter

```
\def\frontmatter{
  \clearpage
  \@mainmatterfalse
  \pagenumbering{Roman}
}
\def\mainmatter{
  \clearpage
  \@mainmattertrue
  \pagenumbering{arabic}
}
\def\backmatter{
  \clearpage
  \@mainmatterfalse
  \settocdepth{chapter}
  \hypersetup{bookmarksopenlevel=0}
}
```

(*End definition for* `\frontmatter`, `\mainmatter`, *and* `\backmatter`. *These functions are documented on page 6.*)

Title page.

```
\def\HUST@titlepage{
  \begin{center}
  \null
  \vskip 2cm
  {\LARGE \HUST@zhtitletitle}\\[0.5cm]
  \rule{\linewidth}{0.5mm}\\[0.55cm]
  {\LARGE \bfseries \sffamily \HEI \HUST@zhtitle}\\[0.35cm]
  \rule{\linewidth}{0.5mm}\\[3.5cm]
  \begin{minipage}[t]{0.8\textwidth}
  \TurnOffTabFontSetting
  \Large
  \setlength{\extrarowheight}{5pt}
  \begin{tabular}{r@{: }l}
    \parbox[t][][t]{6em}{\raggedleft \emph{\HUST@zhauthortitle}} &
    \parbox[t][][t]{15em}{\HUST@zhauthor}
    \\
    \parbox[t][][t]{6em}{\raggedleft \emph{\HUST@zhtranslatortitle}} &
    \parbox[t][][t]{15em}{\HUST@zhtranslator}
```

```
    \ifthenelse{\equal{\HUST@zhsupervisor}{}}{}{
    \\
    \parbox[t][][t]{6em}{\raggedleft \emph{\HUST@zhsupervisortitle}} &
    \parbox[t][][t]{15em}{\HUST@zhsupervisor}
    }
  \end{tabular}
  \TurnOnTabFontSetting
  \end{minipage}
  \vfill
  {\Large \dateformat}
  \end{center}
}
```

\maketitle \makecover Commands to generate title page.

```
\def\maketitle{
  \begingroup
  \hypersetup{allcolors=black}
  \let\HUST@oldthepage\thepage
  \def\thepage{封面}
  \begin{titlepage}
    \thispagestyle{empty}
    \HUST@titlepage
  \end{titlepage}
  \let\thepage\HUST@oldthepage
  \setcounter{page}{1}
  \endgroup
}
\let\makecover\maketitle
```

(*End definition for* `\maketitle` *and* `\makecover`*. These functions are documented on page* 6.)

\tableofcontents A command to generate table of contents.

```
\let\HUST@tableofcontents\tableofcontents
\def\tableofcontents{
  \pdfbookmark{\contentsnamenospace}{\contentsnamenospace}
  \HUST@tableofcontents
  \clearpage
}
```

(*End definition for* `\tableofcontents`*. This function is documented on page* 6.)

\bibliography A command to generate bibliography page.

```
\def\thudot{\unskip.}
```

```
\def\thumasterbib{[Master Thesis]}
\def\thuphdbib{[Doctor Thesis]}
\bibliographystyle{thuthesis}
\let\HUST@bibliography\bibliography
\def\bibliography#1{
  \clearpage
  \phantomsection
  \addcontentsline{toc}{chapter}{\bibname}
  \begingroup
  \fontsize{10.5pt}{10.5pt}\selectfont
  \setlength\bibsep{0.5ex}
  \HUST@bibliography{#1}
  \endgroup
}
```

(*End definition for* `\bibliography`*. This function is documented on page 6.*)

`appendix` The appendix environment.

```
\newif\ifHUST@inappendix
\HUST@inappendixfalse
\newif\ifHUST@appendix@resetmainmatter
\HUST@appendix@resetmainmatterfalse
\renewenvironment{appendix}{
  \if@mainmatter
    \HUST@appendix@resetmainmatterfalse
  \else
    \HUST@appendix@resetmainmattertrue
    \@mainmattertrue
  \fi
  \appendixtitletocon
  \appendices
  \titleformat{\chapter}
  {
    \bfseries\HEI
    \centering
    \fontsize{18pt}{23.4pt}\selectfont
  }
  {\appendixname\,\thechapter}
  {1em}
  {}
  \HUST@inappendixtrue
}{
```

```
  \endappendices
  \HUST@inappendixfalse
  \ifHUST@appendix@resetmainmatter
    \HUST@appendix@resetmainmatterfalse
    \@mainmatterfalse
  \else\fi
}
```

\listoffigures A command to generate list of figures.

```
\let\HUST@listoffigures\listoffigures
\def\listoffigures{
  \clearpage
  \ifHUST@inappendix
    \addtocounter{chapter}{1}
    \def\listfigurename{\appendixname\,\thechapter\hspace{1em}\HUST@listfigurename}
  \else
    \def\listfigurename{\HUST@listfigurename}
  \fi
  \phantomsection
  \ifHUST@inappendix
    \addcontentsline{toc}{chapter}{\thechapter\hspace{1em}\HUST@listfigurename}
  \else
    \addcontentsline{toc}{chapter}{\listfigurename}
  \fi
  \HUST@listoffigures
  \def\listfigurename{\HUST@listfigurename}
}
```

(*End definition for* `\listoffigures`*. This function is documented on page* 6.)

\listoftables A command to generate list of tables.

```
\let\HUST@listoftables\listoftables
\def\listoftables{
  \clearpage
  \ifHUST@inappendix
    \addtocounter{chapter}{1}
    \def\listtablename{\appendixname\,\thechapter\hspace{1em}\HUST@listtablename}
  \else
    \def\listtablename{\HUST@listtablename}
  \fi
  \phantomsection
  \ifHUST@inappendix
```

```
    \addcontentsline{toc}{chapter}{\thechapter\hspace{1em}\HUST@listtablename}
  \else
    \addcontentsline{toc}{chapter}{\listtablename}
  \fi
  \HUST@listoftables
  \def\listtablename{\HUST@listtablename}
}
```

(*End definition for* `\listoftables`*. This function is documented on page 6.*)

10 Other Command

`\email`

```
\def\email#1{
  \href{mailto:#1}{\texttt{#1}}
}
```

(*End definition for* `\email`*. This function is documented on page 7.*)

```
%</class>
```

IV Index

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