FncyChap V1.11

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Chapter 1

Package description

In this chapter a short introduction of the package will be given. The package has been written in order for me to learn more about \LaTeX{} and \TeX{}. I have no idea if this package is written in a good way. Thus, if anyone reads and tries \texttt{FncyChap} I would appreciate any feedback, good or bad. The reason is that it will help me gain insight in writing macros.

In any publication it is important to remember that consistency plays a important role. That is, with this package one can change the appearance of each chapter in the publication. However, this is not desirable so don’t forget modesty and consistency.

1.1 Basic use and requirements

The package is invoked by writing the following in the preamble of your document

\begin{verbatim}
\usepackage[style]{fncychap}
\end{verbatim}

If the option, \texttt{style}, is omitted then the default definition of chapter is used. There are six predefined chapter styles, namely \texttt{Sonny}, \texttt{Lenny}, \texttt{Glenn}, \texttt{Conny}, \texttt{Rejne} and \texttt{Bjarne}. The names corresponds to Swedish given names, almost surely (a.s.) like IKEA\footnote{reg. trademark of Ingvar Kamprad Elmhult Aktiebolag}. Each such style has a default configuration and if that configuration is sufficient, then this is all that is needed.

The package does not rely on any other package. However, for the style \texttt{Lenny} a postscript font is default, but this font can easily be changed. I encourage the use of the default postscript font since it is scalable in a truly huge manner, which makes \texttt{Lenny} nice.
Chapter 2

Commands provided

A part from the chapter styles, some additional commands are provided in order to create user defined chapter heads. The commands will in the sequel be described. Each command is boxed and placed on a separate line. Lets begin the descriptions of the commands.

```
\mghrulefill{width}
```

The above command is a more general version of the command `\hrulefill` in the sense that the width of the ruler can be specified. This command is provided in order to decorate the chapter headers. The chapter heading are divided into two parts. The first part defines the so called `\chapapp` and `\thechapter` which holds information of the text “Chapter” and the current chapter no respectively. The second part is the chapter title provided by the user. From now one, the `\chapapp` and `\thechapter` will be referred to as chapter name and chapter number respectively. The user defined title is referred to as the chapter title.

2.1 Toward customization of the chapter head

The chapter name, number and title can be changed easy first lets introduce the commands following two commands

```
\ChNameUpperCase
```

and

```
\ChNameLowerCase
```

these commands will change the chapter name into either upper or lower case. One additional case command is provided for the chapter name, namely

```
\ChNameAsIs
```

which result in the default case. Three similar commands for the chapter title are defined by the commands

```
\ChTitleUpperCase, \ChTitleLowerCase and \ChNameAsIs
```

The rule width of the predefined chapter styles can be controlled by the command

```
\ChRuleWidth{width}
```

just remember that the `width` must have a unit, for instance `pt`, `mm`, etc. The font related matters such as size, type and face can be sent using the commands

```
\ChNameVar{stuff}, \ChNumVar{stuff} and \ChTitleVar{stuff}
```
related to the chapter name number and title respectively. The argument, \textit{stuff}, to these functions can be for example \texttt{\texttt{ChNameVar}{\textbackslash huge}{\textbackslash rm}{\texttt{centering}}}
Chapter 3

An overview of the chapter styles

The chapter styles have default settings for all of the functions described in section 2.1. However, it can be changed using the commands. Note that if \texttt{centering}, etc is used to format the text part of the chapter style then the result can be ugly. The chapter style \texttt{Bjarne} contains one additional command \texttt{TheAlphaChapter}.

This command will write the chapter number using the corresponding word. \texttt{TheAlphaChapter} have a capability of writing the words \texttt{ZERO} to \texttt{NINETY NINE}.

In the following sections the pre-defined styles are shown along with the default settings. Both the \texttt{chapter} and \texttt{chapter*} are given.

3.1 The chapter Sonny

The following settings have been used as default parameters:

\begin{verbatim}
\ChNameVar{\Large\sf} \ChNumVar{\Huge} \ChTitleVar{\Large\sf}
\ChRuleWidth{0.5pt} \ChNameUpperCase
\end{verbatim}

\begin{figure}[h]
\centering
\includegraphics[width=0.4\textwidth]{sonny_stared.png}
\caption{The stared chapter style sonny}
\end{figure}

\begin{figure}[h]
\centering
\includegraphics[width=0.4\textwidth]{sonny.png}
\caption{The chapter style Sonny}
\end{figure}
3.2 The chapter Lenny

The following settings have been used as default parameters

\ChNameVar{\fontsize{14}{16}\usefont{OT1}{phv}{m}{n}\selectfont}
\ChNumVar{\fontsize{60}{62}\usefont{OT1}{ptm}{m}{n}\selectfont}
\ChTitleVar{\Huge\bfseries\rm}, \ChRuleWidth{1pt}

Figure 3.3: The stared chapter style Lenny

Figure 3.4: The chapter style Lenny

3.3 The chapter Glenn

The following settings have been used as default parameters

\ChNameVar{\bfseries\Large\sf}, \ChNumVar{\Huge}, \ChTitleVar{\bfseries\Large\rm},
\ChRuleWidth{1pt}, \ChNameUpperCase, \ChTitleUpperCase

Figure 3.5: The stressed chapter style Glenn

Figure 3.6: The chapter style Glenn
3.4 The chapter Conny

The following settings have been used as default parameters

\ChNameUpperCase \ChTitleUpperCase \ChNameVar{centering} \Huge \rm\bfseries
\ChNumVar{\Huge} \ChRuleWidth{2pt} \ChTitleVar{centering} \Huge \rm

Figure 3.7: The stared chapter style Conny

Figure 3.8: The chapter style Conny

3.5 The chapter Rejne

The following settings have been used as default parameters

\ChNameVar{centering} \Huge \rm\bfseries, \ChNumVar{\Huge}, \ChTitleVar{centering} \Huge \rm
\ChNameUpperCase, \ChRuleWidth{1pt}

Figure 3.9: The stared chapter style Rejne

Figure 3.10: The chapter style Rejne
3.6 The chapter Bjarne

The following settings have been used as default parameters

\ChNameUpperCase \ChNameVar{raggedleft\normalsize\rm} \ChRuleWidth{1pt}
\ChTitleUpperCase \ChNumVar{raggedleft \bfseries\Large} \ChTitleVar{raggedleft \Large\rm}

Figure 3.11: The stared chapter style Bjarne
Figure 3.12: The chapter style Bjarne
Chapter 4

An simple example

If the pre defined styles does not fulfill your needs then you can modify the formatting routines. The formatting is controlled by three commands. One might as well redefine the original chapter definitions using the \secdef and \renewcommand, see The \TeX\ companion. However, at the time of creating this package I decided that this was easier. The command

\DOCH

formats the chapter name and number. The commands

\DOTI{#1}

and

\DOTIS{#1}

formats the chapter title for \chapter and \chapter* respectively. In order to modify these you will have to use the preamble along with the commands \makeatletter and \makeatother. The in addition some predefined parameters can be used. The predefined length variables are

\myle, \myhi, \px, \py, \pox, \pyy and \RW

note that \RW is special, since it is set by \ChRuleWidth. The formatting controlled by \ChNameVar, \ChNumVar and \ChTitleVar store their values in \CVN, \CVNoV and \CTV respectively. Finally, The functions \FMN\{} and \FMTi\{} acts accordingly to \Ch***AsIs, \Ch***UpperCase and \Ch***LowerCase. Note that the stars indicate appropriate substitution of text, see section 2.1.

To illustrate this lets define a new chapter style in which the Chapter name and number in a \fbox and the chapter title centered. The \fboxrule is linked to the predefined length \RW so that it can be controlled by the command \ChRuleWidth. Try this example at a computer near you.

\makeatletter
\ChNameVar{\Large\rm} \% sets the style for name
\ChNumVar{\Huge} \% sets the style for digit
\ChTitleVar{\Large\rm\centering} \% sets the style for title
\ChRuleWidth{4pt} \% Set RW=4pt
\ChNameUpperCase \% Make name uppercase
\renewcommand\DOCH{%
  \setlength{\fboxrule}{\RW} \% Let fbox lines be controlled by
  \ChRuleWidth
}
\fbox{\CVN\FMN\{\chapapp\}/space \CVNoV/thechapter/par\nobreak
  \vskip 40\px}
\renewcommand{\DTI}{1}{\%}
\CTV\FMti (#1) par\nobreak
\vskip 40\p@}
\renewcommand{\DTIS}{1}{\%}
\CTV\FMti (#1) par\nobreak
\vskip 40\p@}
\maketoother

That is all there is to it. Note that the commands \DTI and \DTIS can be redefined anywhere in the document, but that is not a good idea. Suppose that you want to use the \texttt{TheAlphaChapter}. This can be done by initially chose the style \texttt{Bjørne} and then redefine \texttt{\DOCH}, \texttt{\DTI} and \texttt{\DTIS}. 
Revision details

This is the release (1.11) of the current package. A bug fix of the Lenny option has been included. The problem, reported by Diab Jerius, occurred (underfull vbox) when the option Lenny was used in conjunction with \section-command such that the section is typeset at the next page. This caused one line to be misplaced. The remedy was to box the chapter title.

In the release (1.1) of the current package. A modification was made such that it will work with the book class. The problem occurred when the \fncychap styles Conny, Rejne, Bjarne or Glenn were used in conjunction with the \LaTeX command \texttt{\textbackslash tableofcontents}. The exact reason for the error is not yet found. The problem was reported by Olivier Guibe.

In the prior release there were no major improvements of the package. However, the package name was changed in order to conform with the (DOS) requirement of eight characters. I also received some feedback, informing me that the \LaTeX base have to be post 1994/12/01. This information has been included in the package such that if an old base is used a warning will be written into the log.

Release history:

Release 1 1996/12/13 FancyChapters 1.0b
Release 2 1997/01/08 FncyChap 1.0 (Name change, base date option)
Release 3 1997/01/22 FncyChap 1.1 (Bug fix)
Release 4 1997/04/06 FncyChap 1.11 (Bug fix)