

# The schooldocs package

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## 1 Introduction

The purpose of this package is to provide several layout styles for school documents. It can be used for exercises sheets, exams, course materials. The package sets the page geometry (dimensions of text and margins) and the title typesetting; various *styles* define header, footer and title formatting, Many features are freely configurable. Six different styles are proposed which are named:

**classic**    **elegant**    **modern**    **soft**    **exam**    **collection**

If the document is an exam subject to be completed and returned, we have a particular style, **identity**, in which left part of the header is replaced by “Name:”, whereas center and right parts are empty.

The styles are presented in paragraph 2.4 and the file [schooldocs-examples.pdf](#) shows the result of each.

## 2 Usage

### 2.1 Choosing a style

After loading the package with `\usepackage{schooldocs}`, the style is defined by placing `\pagestyle{<style>}` in the preamble. This command comes from the package `fancyhdr` by Piet van Oostrum. It can be placed before or after entering information described in the next subsection.

In the text body, you can change the style of a particular page by placing `\thispagestyle{<style>}` at the page you want. For example, you can place the command `\thispagestyle{identity}` in an appendix page to render.

### 2.2 Information fields

`\title` Usually a  $\text{\TeX}$  document title is made up of information provided by the macros `\title`, `\date` and `\author`. The `\title` macro has been redefined with an enriched syntax: `\title[<head>]{<title>}`. The optional parameter `<head>` corresponds to the text displayed in the header instead of `<title>`. When not provided, the mandatory argument `<title>` will be used in headers.

The macros `\date` and `\author` have not been redefined but information provided is also used in titles, headers or footers (depending on the style used)<sup>1</sup>.

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<sup>1</sup>The macro `\and`, sometimes used in `\author` to typeset a title with several authors, doesn't work here, except in the **collection** style. It produces a compilation error. The macro `\thanks` also doesn't work but without producing error.

`\subject`      In addition to the previous ones, two other information macros are provided, used in the title, headers or footers, depending on the style: `\subject` and `\school` (or its alias `\institute`). The macro `\subject` has an optional argument, like in `\title: \subject[head]{title}` which allows to place an alternative text in header, different from the one displayed in the title.

Information macros have to be called in the preamble<sup>2</sup>, they are optional. If omitted, the corresponding field will be empty, except for the date which will display today's date. So, if you do not want any date, just write `\date{}`. When title elements like subject or date are missing, the title height will be reduced accordingly.

Except for `\date`, all these information macros accept multi-line arguments, for example `\school{Royal College of Pataphysics\\London}`. To typeset the main title on two (or more) lines, use `\\[1ex]` for a good vertical spacing.

When using the `hyperref` package (by Sebastian Rahtz and Heiko Oberdiek) to produce a pdf output, information provided by `\title`, `\subject` and `\author` (and `\school`<sup>3</sup>) will be written in the pdf properties also.

The file `schooldocs-examples.pdf` uses the examples of the following table.

macro	example
<code>\title</code>	<code>\title[The classic style]{The classic style layout}</code>
<code>\subject</code>	<code>\subject[Pathography / M2A]{Pathography / Master 2A}</code>
<code>\author</code>	<code>\author{Antoine Missier}</code>
<code>\school</code>	<code>\school{Royal College of Pataphysics}</code>
<code>\date</code>	<code>\date{May 4, 2020}</code>

`\subtitle`      In the **exam** style, the title uses an additional field provided by the macro `\subtitle{text}`. The parameter `text` will be placed under the other title elements and before the separation rule, if there is one. For instance `\subtitle{Duration of the test: 2\,h}`. For a multi-line argument, the line break instruction must be `\par` and not `\\`.

## 2.3 Making the title

`\maketitle`      As in  $\text{\LaTeX}$  standard classes, the title is produced by the macro `\maketitle`, which should be placed after `\begin{document}`. This command has been redefined by the package. Indeed, the standard title produced by the  $\text{\LaTeX}$  class `article`, seems inappropriate for school documents like exercise sheets for example. Vertical space before the title is reduced and an horizontal rule is typeset to separate the title from the following text. By default, the title is centered but one can change this, as presented in section 3.2, to get a left or right-aligned title (an also boxed). Various titles are presented in the file [schooldocs-examples.pdf](#).

The macro has an optional parameter `\maketitle[rulelength]` to set the length of the separation rule, by default 2.5 cm. The rule can be totally removed by setting the optional argument to 0 cm; you can also typeset a rule of whole line width with `\maketitle[\linewidth]` or `\maketitle[\textwidth]`.

<sup>2</sup>Nevertheless, the macros `\date` and `\author` can be used in the document body.

<sup>3</sup>The *author* field of the pdf properties will be filled like this: `author (school)`, but `\author` should be called before `\school` in the preamble.

Each style has its own title formatting. Nevertheless the package provides a “standard” title when no style is loaded or with the  $\LaTeX$  styles **empty** or **plain**. The **elegant** style keeps also this “standard” title style.

`\seprule` As in the title, a rule can also be used in the text body to make separations. This is done by the macro `\seprule[⟨length⟩]` which produces an horizontal centered rule of (optional)  $\langle length \rangle$ , by default 2.5 cm.

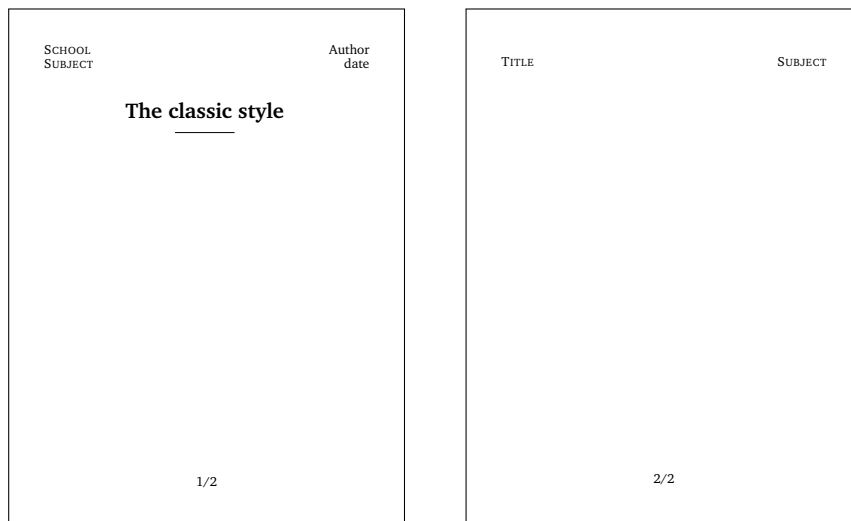
`\correct` For typesetting a correct version of an exercise sheet, we provide the macro `\correct`, which adds “- Correct Version” to the title. It should be placed in the preamble. Combined with packages that deal with multiple versions of a document, this macro avoids to define different titles for a an exercise sheet an its correct version. However in the **exam** style, the text “Correct version” will not be added in the title (except in headers), but will be substituted for the subtitle.

`\makesmalltitle` As in the package `phfnote` by Philippe Faist, it seems wisely to propose a compact title, where information provided by `\title`, `\subject` and `\date` are presented on a single line, depending on the selected style (see `schooldocs-examples.pdf`). The rule is always displayed and expands on the whole line width.

## 2.4 Style layouts

According to good typographic practice, the header on the title page should be empty (see The  $\LaTeX$  Companion). This “rule” is seldom observed in school documents, and, on the first page, we find often information (author, school, etc.) on top left and the date on top right, as for a letter. Except for the **classic** style, that we present first, we wanted to comply with good practice, but we keep some information in the footer yet.

We present below miniature views to show the layout of the different styles. The file [schooldocs-examples.pdf](#) gives a real view of them. For several styles, a rule is typeset under the header. It can be displayed or discarded by setting its width, and likewise for a rule over the footer. The format of each element and also some space settings are freely configurable, see section 3.3.



**The elegant style**  
Subject  
date

SCHOOL Author

TITLE Page

**The modern style**  
Subject  
          

SCHOOL Author  
          date

TITLE SUBJECT

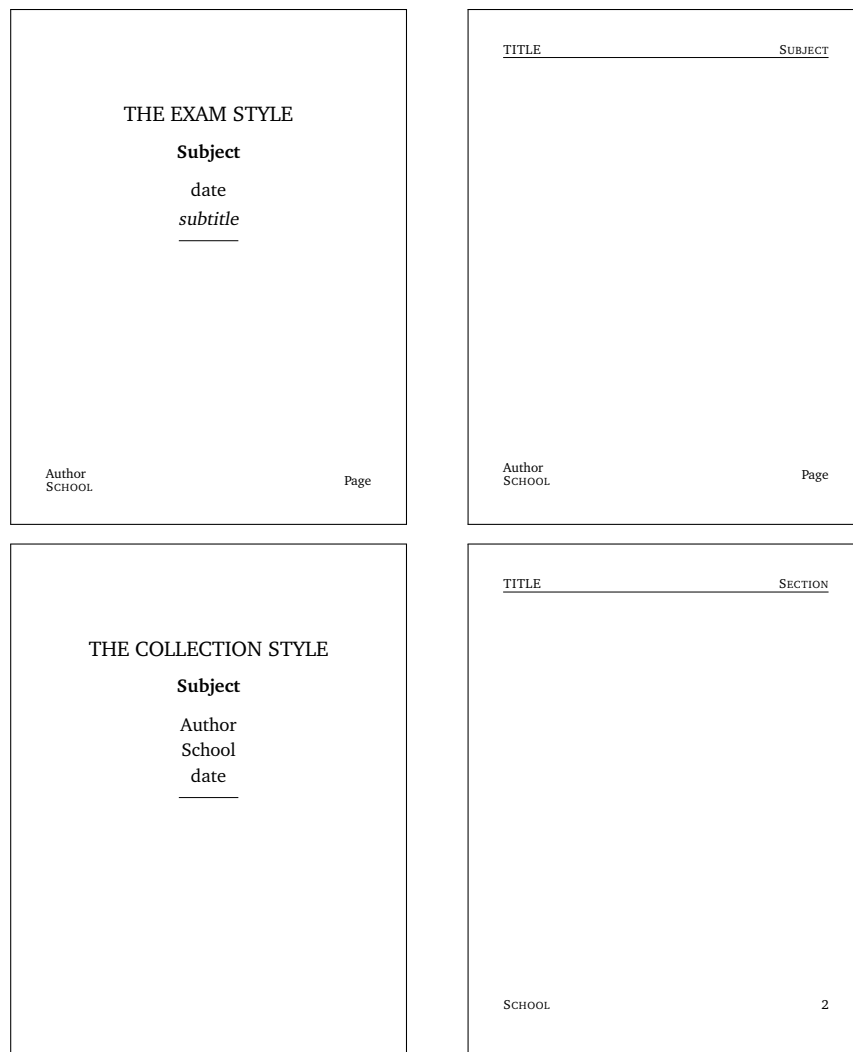
2/2

**The soft style**  
          

SCHOOL Author  
          SUBJECT  
          date

TITLE Page

SCHOOL SUBJECT



The **collection** style is useful for longer documents. In it the name of the current section appears in the right header and changes as things progress, as in the  $\LaTeX$  **book** class.

## 3 Settings

### 3.1 Page layout

The page layout is set in the same way, for all styles. It is defined by the macro `\geometry` of the package `geometry` (by Hideo Umeki and David Carlisle). According to good typographic practice (see the  $\LaTeX$  Companion, the `typearea` package or KOMA-Script bundle documentation) the ratio between the text body (the type area as named by typographers) and the page size must be the same horizontally and vertically. This ratio gauges the “shade of gray” of a page. The default scale in the `geometry` package is 0.7. For school documents, it seems

that this setting leaves too much white space in margins, thus this ratio has been set to 0.75. It can be redefined with the `\newgeometry` command<sup>4</sup>. Furthermore, according to “canons of page construction”, in a one-sided document, the ratio between the left and right margins should be 1:1, while the ratio between top and bottom margins should be 1:2. It seems that this recommended ratio of 1:2 is seldom observed and it produces a very wide bottom margin. Besides, when loading the `geometry` package, the default vertical ratio is 2:3 and not 1:2. To get more balanced margins, we have prefer to set it at 3:4: `\geometry{scale=0.75,vmarginratio=3:4,heightrounded}`<sup>5</sup>.

### 3.2 Title settings

Several parameters allow to customize the title composition. They are presented in the following table with their default settings. Colors can be changed with `\definecolor`, macros with `\renewcommand` and lengths with `\setlength`. Most of command names are explicit and don’t need to give any information about their use. `\titleflush` manages the alignment: centered by default, it can be left-aligned with `\renewcommand{\titleflush}{flushleft}` or right-aligned with `\renewcommand{\titleflush}{flushright}`<sup>6</sup>.

The length `\titlesep` sets the vertical spacing between the fields *title* and *subject*, except for the **classic** and **soft** styles, witch contain only the field *title*, or if the field *subject* is not given. Vertical space between other title fields is defined in relation to `\titlesep` (`0.5\titlesep` for most).

Unless otherwise stated, the column “special settings” of the following table applies to the **exam** and **collection** styles.

parameter	default settings	special settings
<code>titlecolor</code>	<code>black</code>	
<code>\titlestyle</code>	<code>\LARGE\bfseries</code>	<code>\LARGE\MakeUppercase</code>
<code>\subjectstyle</code>	<code>\large</code>	<code>\Large\bfseries</code>
<code>\datestyle</code>	<code>\large</code>	
<code>\smalltitledatestyle</code>	<code>\large\slshape</code>	
<code>\titleflush</code>	<code>center</code>	
<code>\titletopskip</code>	<code>-1.32 cm</code>	<code>-0.67 cm (classic, soft), 0.67 cm</code>
<code>\smalltitletopskip</code>	<code>-1.32 cm</code>	
<code>\titlebottomskip</code>	<code>\medskipamount</code>	
<code>\titlesep</code>	<code>2\medskipamount</code>	<code>2\bigskipamount</code>
<code>\seprulewidth</code>	<code>0.3 pt</code>	
<code>\seprulelength</code>	<code>2.5 cm</code>	

`\subtitlestyle`  
`\titlecorrectstyle`

The **exam** style has two additional setting macros: `\subtitlestyle`, set by default to `\large\slshape`, and `\titlecorrectstyle`, for the composition of Correct Version produced by `\correct`, set by default to `\color{red}\large\scshape`.

In the **collection** style, the fields *school* and *author* are included into the title. Their features are then controlled by `\authorstyle`<sup>7</sup> set to `\Large`.

To create a separate page for the title (in particular for **exam** or **collection**), you can place `\maketitle` into an environment `titlepage` provided by L<sup>A</sup>T<sub>E</sub>X.

<sup>4</sup>You can also call `geometry` before `schooldocs`. Setting the scale factor several times doesn’t work.

<sup>5</sup>The option `heightrounded` rounds text height to *n*-times (*n* an integer) the height of a line, to avoid “underfull vbox” in some cases.

<sup>6</sup>This macro has no effect with the **exam** and **collection** styles, the title is always centered.

<sup>7</sup>For other styles, the macro `\authorstyle` belongs to headers or footers parameters.

`\boxedshape` A particular formatting has been predefined to produce a slightly shaded box around the title: `\boxedshape{<text>}` (thanks to the `fancybox` package by Timothy Van Zandt). It can be used within the command `\titlestyle` if we want to get this kind of effect, e.g.

```
\renewcommand{\titlestyle}{\LARGE\sffamily\bfseries\boxedshape}.
```

### 3.3 Headers and footers

The typeset of headers and footers is produced thanks to dedicated macros<sup>8</sup> of the `fancyhdr` package. As for the title, several macros allow to customize some settings. They are presented in the table below. Let us specify that `\pagenamestyle` defines the format of the word “page” used in front of the page number.

The `\headstyle` and `\footstyle` commands are generic for all elements of headers and footers. They are combined with macros giving specific settings for each field.

parameter	default setting
<code>headingcolor</code>	<code>black</code>
<code>\headstyle</code>	<code>\small\color{headingcolor}</code>
<code>\footstyle</code>	<code>\small\color{headingcolor}</code>
<code>\headtitlestyle</code>	<code>\scshape</code>
<code>\headsubjectstyle</code>	<code>\scshape</code>
<code>\schoolstyle</code>	<code>\scshape</code>
<code>\headdatestyle</code>	<code>\textnormal</code>
<code>\authorstyle</code>	<code>\textnormal</code>
<code>\pagenamestyle</code>	<code>\textnormal</code>

The **exam** and **collection** styles have a specific setting for `\headtitlestyle`, defined by `\renewcommand{\headtitlestyle}{\MakeUppercase}`.

Macros that allow to display (or remove) the rule in the header<sup>9</sup> or the footer come from the `fancyhdr` package. For example, in any style, the rule in the header is removed with: `\renewcommand{\headrulewidth}{0pt}`, and displayed in the footer with: `\renewcommand{\footrulewidth}{0.4pt}`

### 3.4 Internationalization

Three keywords are used by the package: *page*, *Correct version*, and *Name*, defined by the macros `\pagename`, `\correctname` and `\identityname`. `\pagename` is used in the header or the footer, `\correctname` by the macro `\correct` and `\identityname` by the **identity** style. These keywords get automatic translation in a few languages<sup>10</sup> according to the selected language by the `babel` or `polyglossia` package. They can be redefined, with `\renewcommand`, or else you can use macros from the `translations` package by Clemens Niederberger (allowing dynamic language change), e.g. `\DeclareTranslation{romanian}{pagin\u{a}}` (in the preamble).

<sup>8</sup>The `fancyhdr` package provides the commands `\lhead`, `\chead`, `\rhead` for the left, center and right parts of the header, and the same for the footer: `\lfoot`, `\cfoot` and `\rfoot`.

<sup>9</sup>Indeed we have redefined the `\headrule` macro such that the rule never appears on the first page.

<sup>10</sup>Translation is currently integrated into the package for the following languages: French, German, Spanish, Italian, Portuguese.

## 4 Implementation

### 4.1 Required packages and geometry settings

```
1 \@ifpackageloaded{geometry}{\RequirePackage{geometry}}
2 \let\footruleskip\relax % because memoir class uses it
3 \RequirePackage{fancyhdr}
4 \RequirePackage{ifthen}
5 \RequirePackage{lastpage}
6 \RequirePackage{fancybox}
7 \RequirePackage{xcolor}
8 \RequirePackage{translations}
9
10 \geometry{scale=0.75,vmarginratio=3:4,heightrounded}
11
```

If the geometry package has been loaded before, we don't load it to avoid option clash.

To change the scale factor, use `\newgeometry` because the `\geometry` command will not do it when the scale is already defined.

### 4.2 Internationalization

```
12 \DeclareTranslationFallback{schooldocs-pagename}{page}
13 \DeclareTranslationFallback{schooldocs-correct}{Correct version}
14 \DeclareTranslationFallback{schooldocs-name}{Name:}
15
16 \DeclareTranslation{english}{schooldocs-pagename}{page}
17 \DeclareTranslation{english}{schooldocs-correct}{Correct version}
18 \DeclareTranslation{english}{schooldocs-name}{Name:}
19
20 \DeclareTranslation{french}{schooldocs-pagename}{page}
21 \DeclareTranslation{french}{schooldocs-correct}{Corrigé}
22 \DeclareTranslation{french}{schooldocs-name}{Nom :}
23
24 \DeclareTranslation{german}{schooldocs-pagename}{Seite}
25 \DeclareTranslation{german}{schooldocs-correct}{Musterlösung}
26 \DeclareTranslation{german}{schooldocs-name}{Name:}
27
28 \DeclareTranslation{spanish}{schooldocs-pagename}{página}
29 \DeclareTranslation{spanish}{schooldocs-correct}{Correccion}
30 \DeclareTranslation{spanish}{schooldocs-name}{Apellido:}
31
32 \DeclareTranslation{italian}{schooldocs-pagename}{pagina}
33 \DeclareTranslation{italian}{schooldocs-correct}{Corretto}
34 \DeclareTranslation{italian}{schooldocs-name}{Nome:}
35
36 \DeclareTranslation{portuges}{schooldocs-pagename}{página}
37 \DeclareTranslation{portuges}{schooldocs-correct}{Corrigiu}
38 \DeclareTranslation{portuges}{schooldocs-name}{Nome:}
39
40 \newcommand*\pagename{\GetTranslation{schooldocs-pagename}}
41 \newcommand*\correctname{\GetTranslation{schooldocs-correct}}
42 \newcommand*\identityname{\GetTranslation{schooldocs-name}}
43
```



### 4.3 Information fields

After being defined, information fields are set to empty, to make tests with them work well.

```
44 \renewcommand{\title}[2] []{\long\def\@title{#2}
45   \ifthenelse{\equal{#1}{}}{\def\@headtitle{#2}}{\def\@headtitle{#1}}
46   \@ifpackageloaded{hyperref}{\hypersetup{pdftitle={\@headtitle}}}{
47 }
48 \title{}
49 \author{}
50
51 \newcommand\school[1]{\long\def\@school{#1}
52   \@ifpackageloaded{hyperref}{
53     \hypersetup{pdfauthor={\@author\ (\@school)}}}{
54 }
55 \school{}
56 \newcommand{\institute}{\school}
57
58 \let\subject\relax
59 \newcommand{\subject}[2] []{\long\def\@subject{#2}
60   \ifthenelse{\equal{#1}{}}{\def\@headsubject{#2}}{\def\@headsubject{#1}}
61   \@ifpackageloaded{hyperref}{\hypersetup{pdfsubject={\@headsubject}}}{
62 }
63 \def\@subject{}
64 \def\@headsubject{}
```

Because KOMA-Script package also uses the `\subject` macro, we make a `\relax` on this command.

`\subject{}` doesn't work with the `\@empty` test used below in `\maketitle`, thus we define `\@subject` and `\@headsubject` as empty by default.

### 4.4 Settings

First we present the title settings.

```
65 \definecolor{titlecolor}{named}{black}
66 \newcommand{\titlestyle}{\LARGE\bfseries}
67 \newcommand{\subjectstyle}{\large}
68 \newcommand{\datestyle}{\large}
69 \newcommand{\smalltitledatestyle}{\large\slshape}
70 \newcommand{\titleflush}{center}
71 \newlength{\titledtopskip} \setlength{\titledtopskip}{-1.32cm}
72 \newlength{\smalltitledtopskip} \setlength{\smalltitledtopskip}{-1.32cm}
73 \newlength{\titlesep} \setlength{\titlesep}{2\medskipamount}
74 \newlength{\titlebottomskip} \setlength{\titlebottomskip}{\medskipamount}
75 \newlength{\seprulewidth} \setlength{\seprulewidth}{0.3pt}
76 \newlength{\seprulelength} \setlength{\seprulelength}{2.5cm}
77
78 \newcommand{\boxedshape}[1]{%
79   \color{gray} % no effect
80   \setlength{\fboxsep}{4.5pt}
81   \setlength{\shadowsize}{3pt}
82   \shadowbox{\quad\textcolor{titlecolor}{\rule{0pt}{2ex}#1}\quad}
83 }
84
```

Default value for `\fboxsep` is 3 pt and for `\shadowsize` is 4 pt. These settings are local.

Next the headers and footers settings.

```

85 \definecolor{headingcolor}{named}{black}
86 \newcommand{\headstyle}{\small\color{headingcolor}}
87 \newcommand{\footstyle}{\small\color{headingcolor}}
88 \newcommand{\headtitlestyle}{\scshape}
89 \newcommand{\headsubjectstyle}{\scshape}
90 \newcommand{\schoolstyle}{\scshape}
91 \newcommand{\headdatestyle}{\textnormal}
92 \newcommand{\authorstyle}{\textnormal}
93 \newcommand{\pagenamestyle}{\textnormal}
94 \setlength{\headheight}{\baselineskip}
95 \renewcommand{\headrule}{\ifthenelse{\thepage=1}{%
96   {\vspace{-2ex}\rule{\headwidth}{0pt}}}%
97   {\vspace{-2ex}\rule{\headwidth}{\headrulewidth}}}
98 }
99

```

The `\headrule` macro redefinition allow to remove the rule on the first page.

The header height is set to `\baselineskip` to avoid error messages (“headheight too small”) when the text size is greater than or equal to `\small`.

## 4.5 Title composition

```

100 \renewcommand{\maketitle}[1][\seprulelength]{
101   \mbox{}\par\vspace{\titletopskip}
102   \begin{titleflush}
103     {\color{titlecolor}
104     {\titlestyle{\@title}}
105     \ifx\@subject\@empty\else
106       \par\vspace{\titlesep}\subjectstyle\@subject
107     \fi
108     \ifthenelse{equal{\@date}}{}}{}}{%
109     \par\vspace{0.5\titlesep} \datestyle\@date}
110   \par\vspace{0.5\titlesep}
111   }
112   \ifthenelse{\lengthtest{#1 > 0cm}}{\rule{#1}{\seprulewidth}}{}
113   \end{titleflush}
114   \vspace{\titlebottomskip}
115 }
116
117 \newcommand{\makesmalltitle}{
118   \mbox{}\par\vspace{\smalltitletopskip}
119   \begin{center}
120     {\color{titlecolor}
121     {\titlestyle{\@title}}
122     \hfill \subjectstyle\@subject
123     \ifthenelse{equal{\@date}}{}}{}}{%
124     \enskip --\enskip \smalltitledatestyle\@date}
125   }
126   \rule{\linewidth}{\seprulewidth}
127   \end{center}

```

```

128   \vspace{\titlebottomskip}
129 }
130
131 \newcommand\correct{%
132   \let\@originalheadtitle\@headtitle
133   \def\@headtitle{\@originalheadtitle ~--~\correctname}
134   \@ifpackageloaded{hyperref}{%
135     \AtBeginDocument{\hypersetup{pdftitle={\@headtitle}}}}{}
136   \let\@originaltitle\@title
137   \def\@title{\@originaltitle ~--~\correctname}
138 }
139
140 \newcommand{\seprule}[1][\seprulelength]{\begin{center}
141   \raisebox{0.25\baselineskip}{\rule{#1}{\seprulewidth}}\end{center}}
142

```

\AtBeginDocument is necessary in the \correct macro because \correctname can be redefined by babel at \begin{document}.

## 4.6 Basic styles

The header in the **classic** style is displayed on two lines, therefore we have to increase the height \headheight.

If we want to include header or footer in the total body, we can add the command \geometry{includehead} respectively \geometry{includefoot} in the preamble.

```

143 \fancypagestyle{classic}{%
144   \renewcommand{\headrulewidth}{0pt}
145   \addtolength{\headheight}{\baselineskip}
146   \head{\headstyle\ifthenelse{\thepage=1}{\schoolstyle\@school\mbox{}\\
147     \headsubjectstyle\@subject}{\headtitlestyle\@headtitle} }
148   \rhead{\headstyle\ifthenelse{\thepage=1}{\authorstyle\@author\mbox{}\\
149     \headdatestyle\@date}{\headsubjectstyle\@headsubject}}
150   \cfoot{\footstyle \thepage /\pageref{LastPage}}
151   \setlength{\titletopskip}{-0.67cm}
152   \renewcommand{\maketitle}[1][\seprulelength]{%
153     \mbox{}\par\vspace{\titletopskip}
154     \begin{titleflush}
155       {\color{titlecolor}\titlestyle{\@title}}
156       \par\vspace{0.5\titlesep}
157       \ifthenelse{\lengthtest{#1>0cm}}{\rule{#1}{\seprulewidth}}{}
158     \end{titleflush}
159     \vspace{\titlebottomskip}
160   }
161   \renewcommand{\makesmalltitle}{
162     \mbox{}\par\vspace{\smalltitletopskip}
163     \begin{center}
164       {\color{titlecolor}
165         {\titlestyle{\@title}}
166         \hfill \subjectstyle\@subject
167       }
168       \rule{\linewidth}{\seprulewidth}
169     \end{center}
170     \vspace{\titlebottomskip}

```

```

171   }
172 }
173
174 \fancypagestyle{elegant}{%
175   \renewcommand{\headrulewidth}{0pt}
176   \lhead{\headstyle
177     \ifthenelse{\thepage=1}{}{\headtitlestyle\@headtitle}}
178   \rhead{\headstyle
179     \ifthenelse{\thepage=1}{}{%
180       \pagenamestyle\pagenam~\thepage /\pageref{LastPage}}}
181   \lfoot{\ifthenelse{\thepage=1}{\footstyle\schoolstyle\@school}{}}
182   \cfoot{}
183   \rfoot{\ifthenelse{\thepage=1}{\footstyle\authorstyle\@author}{}}
184 }
185
186 \fancypagestyle{modern}{%
187   \lhead{\headstyle
188     \ifthenelse{\thepage=1}{}{\headtitlestyle\@headtitle}}
189   \rhead{\headstyle
190     \ifthenelse{\thepage=1}{}{\headsubjectstyle\@headsubject}}
191   \lfoot{\ifthenelse{\thepage=1}{\footstyle\schoolstyle\@school}{}}
192   \cfoot{\ifthenelse{\thepage=1}{}{
193     \footstyle\thepage /\pageref{LastPage}}}
194   \rfoot{\footstyle\ifthenelse{\thepage=1}{%
195     \authorstyle\@author
196     \ifx\@author\empty\else\ \fi
197     \headdatestyle\@date\ignorespaces}{}}
198   }
199   \renewcommand{\maketitle}[1][\seprulelength]{%
200     \mbox{}\par\vspace{\titletopskip}
201     \begin{titleflush}
202       {\color{titlecolor}
203       {\titlestyle{\@title}}
204       \ifx\@subject\@empty\else
205         \par\vspace{\titlesep}\subjectstyle\@subject
206       \fi
207       \par\vspace{0.5\titlesep}
208     }
209     \ifthenelse{\lengthtest{##1>0cm}}{\rule{##1}{\seprulewidth}}{}
210   \end{titleflush}
211   \vspace{\titlebottomskip}
212 }
213 \renewcommand{\makesmalltitle}{
214   \mbox{}\par\vspace{\smalltitletopskip}
215   \begin{center}
216     {\color{titlecolor}
217     {\titlestyle{\@title}}
218     \hfill \subjectstyle\@subject
219   }
220   \rule{\linewidth}{\seprulewidth}
221 \end{center}
222 \vspace{\titlebottomskip}
223 }
224 }

```

```

225
226 \fancypagestyle{soft}{%
227   \lhead{\headstyle
228     \ifthenelse{\thepage=1}{\headtitlestyle\@headtitle}}
229   \rhead{\headstyle
230     \ifthenelse{\thepage=1}{\%
231       \pagenamestyle\pagename~\thepage /\pageref{LastPage}}
232   \lfoot{\footstyle\@schoolstyle\@school}
233     \ifthenelse{\thepage=1}{\ifx\@author\empty\else\ \fi
234       \authorstyle\@author}{\}
235   }
236   \cfoot{}
237   \rfoot{\footstyle\headsubjectstyle\@headsubject}
238     \ifthenelse{\thepage=1}{\ifx\@date\empty\else\ \fi
239       \headdatestyle\@date\ignorespaces}{\}
240   }
241   \setlength{\titletopskip}{-0.67cm}
242   \renewcommand{\maketitle}[1][\seprulelength]{%
243     \mbox{}\par\vspace{\titletopskip}
244     \begin{\titleflush}
245       {\color{titlecolor}\titlestyle{\@title}}
246       \par\vspace{0.5\titlesep}
247       \ifthenelse{\lengthtest{##1>0cm}}{\rule{##1}{\seprulewidth}}{\}
248     \end{\titleflush}
249     \vspace{\titlebottomskip}
250   }
251   \renewcommand{\makesmalltitle}{
252     \mbox{}\par\vspace{\smalltitletopskip}
253     \begin{center}
254       {\color{titlecolor}
255         {\titlestyle{\@title}}
256         \hfill \mbox{}
257       }
258       \rule{\linewidth}{\seprulewidth}
259     \end{center}
260     \vspace{\titlebottomskip}
261   }
262 }
263
264 \fancypagestyle{identity}{%
265   \lhead{\headstyle\headtitlestyle \identityname}
266   \chead{}
267   \rhead{}
268   }
269

```

## 4.7 Extended styles

```

270 \fancypagestyle{exam}{%
271   \let\subtitle\relax % because KOMA-Script uses it
272   \newcommand\subtitle[1]{\long\def\@subtitle{##1}}
273   \subtitle{}
274   \renewcommand{\headtitlestyle}{\MakeUppercase}
275   \lhead{\headstyle

```

```

276     \ifthenelse{\thepage=1}{\headtitlestyle{\@headtitle}}
277 \rhead{\headstyle
278     \ifthenelse{\thepage=1}{\headsubjectstyle\@headsubject}}
279 \lfoot{\footstyle
280     \authorstyle\@author
281     \ifx\@author\empty\else\ \fi
282     \schoolstyle\@school
283 }
284 \cfoot{}
285 \rfoot{\footstyle \pagenamestyle\pagenam~\thepage/\pageref{LastPage}}
286 \setlength{\titletopskip}{0.67cm}
287 \setlength{\titlesep}{2\bigskipamount}
288 \renewcommand{\titlestyle}{\LARGE\MakeUppercase}
289 \renewcommand{\subjectstyle}{\Large\bfseries}
290 \newcommand{\subtitlestyle}{\large\slshape}
291 \newcommand*{\titlecorrectstyle}{\color{red}\large\scshape}
292 \renewcommand\correct{%
293     \let\@originalheadtitle\@headtitle
294     \def\@headtitle{\@originalheadtitle ~--~\correctname}
295     \@ifpackageloaded{hyperref}{%
296         \AtBeginDocument{\hypersetup{pdftitle={\@headtitle}}}}{}
297     \renewcommand{\subtitlestyle}{\titlecorrectstyle}
298     \subtitle{\correctname}
299 }
300 \renewcommand{\maketitle}[1][\seprulelength]{%
301     \mbox{}\par\vspace{\titletopskip}
302     \begin{center}
303         {\color{titlecolor}
304         {\titlestyle{\@title}}
305         \par\vspace{\titlesep}{\subjectstyle \@subject}
306         \par\vspace{\titlesep}
307         \ifthenelse{\equal{\@date}{} }{}{%
308             \datestyle\@date\par\vspace{0.5\titlesep}}
309         \ifthenelse{\equal{\@subtitle}{} }{}{%
310             \subtitlestyle\@subtitle\par\vspace{0.5\titlesep}
311         }
312         }
313         \ifthenelse{\lengthtest{##1>0cm}}{\rule{##1}{\seprulewidth}}{}
314     \end{center}
315     \vspace{\titlebottomskip}
316 }
317 }
318
319 \fancypagestyle{collection}{%
320     \renewcommand{\headtitlestyle}{\MakeUppercase}
321     \lhead{\headstyle\headtitlestyle\@headtitle}
322     \AtBeginDocument{\renewcommand{\sectionmark}[1]{\markboth{##1}{}}}
323     \rhead{\headstyle\headsubjectstyle\leftmark} \%\@section
324     \lfoot{\footstyle\schoolstyle \@school}
325     \cfoot{}
326     \rfoot{\footstyle\thepage}
327     \setlength{\titletopskip}{0.67cm}
328     \setlength{\titlesep}{2\bigskipamount}
329     \renewcommand{\titlestyle}{\LARGE\MakeUppercase}

```

```

330 \renewcommand{\subjectstyle}{\Large\bfseries}
331 \renewcommand{\authorstyle}{\Large}
332 \renewcommand{\datestyle}{\Large}
333 \renewcommand{\maketitle}[1][\seprulelength]{%
334 \thispagestyle{empty}
335 \mbox{}\par\vspace{\titletopskip}
336 \begin{center}
337 \color{titlecolor}
338 {\titlestyle{\@title}}
339 \par\vspace{\titlesep} {\subjectstyle{\@subject}}
340 \par\vspace{\titlesep}
341 \ifx\@author\empty
342 \else \authorstyle
343 \begin{tabular}[t]{c}\@author\end{tabular}
344 \ifx\@school\empty\else\par\vspace{1ex} \@school\fi
345 \par\vspace{0.5\titlesep}
346 \fi
347 \ifthenelse{\equal{\@date}{}}{\}{\%
348 \datestyle\@date \par\vspace{0.5\titlesep}}
349 }
350 \ifthenelse{\lengthtest{##1>0cm}}{\rule{##1}{\seprulewidth}}{\}
351 \end{center}
352 \vspace{\titlebottomskip}
353 }
354 }

```

In the **collection** style, we redefine `\sectionmark` with `\AtBeginDocument` to prevent `\MakeUppercase` from eliminating the section number (or you can use `\nouppercase` here).

`\ifthenelse` doesn't work when `\and` is used within `\author`.

Notice the `\pagestyle{empty}` in `\maketitle` which prevents any header on the first page.