The schooldocs package

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1 Introduction

The aim of this package is to offer diverse layout styles for school-related documents. It serves well in creating exercise sheets, exams, and course materials. The package defines page geometry (text and margins dimensions) and title formatting. Various *styles* are available defining settings for headers, footers or alternative title formatting, providing many customizable features. Six different styles are proposed that are named:

classic   elegant   modern   soft   exam   collection

Furthermore, a specific style named **identity** is provided for documents like exam sheets that need to be completed and returned. This style replaces the left header with "Name:", while keeping the center and right parts empty.

An overview of these styles is presented in section 2.4 and you can observe the visual outcomes of each style in the file schooldocs-examples.pdf.

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 fancyhdr package by Piet van Oostrum. It can be placed before of after entering the information described in the next subsection.

You can change the style of a particular page by placing `\thispagestyle{⟨style⟩}` on the page you desire. For example, on an appendix page that needs to be rendered you can use the command `\thispagestyle{identity}`.

2.2 Information fields

\title
Typically a LaTeX document title is assembled using information from the macros `\title`, `\date`, and `\author`. The `\title` macro has been extended 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 altered, but the provided information is also used in titles, headers or footers (depending on the chosen style)[1].

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[1] The macro `\and`, which can be employed in the `\author` command to typeset a title with several authors, does not function here, except in the **collection** style. Attempting to use it will result in a compilation error. The `\thanks` macro also doesn't work, although it does not generate an error.

`\subject`
`\school`
`\institute`

Two additional information macros are provided for use in titles, headers or footers, depending on the style: `\subject` and `\school` (or its alias `\institute`). The `\subject` macro includes an optional argument, similar to `\title`: `\subject[`⟨*head*⟩`]{`⟨*title*⟩`}`. This enables the placement of an alternative text in the header, distinct from the text displayed in the title.

Information macros must be invoked in the preamble[2], they are optional. In cases of omission, the corresponding field will remain empty – except for the date field, which will display today's date. Therefore, if you wish to exclude the date, you can simply enter `\date{}`. If certain title elements, such as subject or date, are absent, the title height will be reduced accordingly.

All of these information macros, except for `\date`, accept multi-line arguments, e.g. `\school{Royal College of Pataphysics\\London}`. Within the `\title` macro, if you wish to typeset two (or more) lines, use `\\[1ex]` for a proper vertical spacing.

When employing the `hyperref` package (developed by Sebastian Rahtz and Heiko Oberdiek), the information provided via `\title`, `\subject`, and `\author` (as well as `\school`[3]) will also be included in the PDF properties.

The file `schooldocs-examples.pdf` utilizes the information fields outlined in the following table.

Macro	Example
`\title`	`\title[The classic style]{The classic style layout}`
`\subject`	`\subject[Pathography / M2A]{Pathography / Master 2A}`
`\author`	`\author{Antoine Missier}`
`\school`	`\school{Royal College of Pataphysics}`
`\date`	`\date{May 4, 2020}`

`\subtitle`

Within the **exam** style, the title includes an additional field provided by the macro `\subtitle{`⟨*text*⟩`}`. The ⟨*text*⟩ argument will be positioned beneath the other title elements and above the separation rule, if present. For instance, `\subtitle{Duration of the test: 2\,h}`. For a multi-line argument, use `\par` for line breaks instead of `\\`.

2.3   Making the title

`\maketitle`

Just like in the standard LaTeX classes, the title is generated using the `\maketitle` macro, which is placed after `\begin{document}`. This macro has been redefined by the package. In fact, the default title produced by the LaTeX `article` class appears unsuitable for school documents such as exercise sheets. Vertical spacing before the title has been reduced and, a horizontal rule is inserted to separate the title from the subsequent text. By default, the title is centered, but this can be altered, as demonstrated in section 3.2, to achieve a left or right alignment (or even boxing). Various title examples can be found in the file schooldocs-examples.pdf.

The macro has on optional parameter `\maketitle[`⟨*rulelength*⟩`]` to define the length of the separation rule, which is 2.5 cm by default. The rule can be completely removed by setting the optional argument to 0 cm. Alternatively, you can typeset a rule spanning the entire line using `\maketitle[\linewidth]`.

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[2] However, the macros `\date` and `\author` can be used within the document body.

[3] The *author* field of the PDF properties will be filled as follows: `author (school)`. However `\author` should be called before `\school` in the preamble.

Each style has its own title formatting. Nevertheless the package offers a "standard" title formatting when no specific style is loaded or when using the LaTeX styles **empty** or **plain**. The **elegant** style also retains this "standard" title formatting.

`\seprule`   Just like in the title, a rule can also be used within the text body for creating separations. This is achieved using the `\seprule[`⟨*length*⟩`]` macro, producing a horizontal and centered rule of optional ⟨*length*⟩, with a default of 2.5 cm.
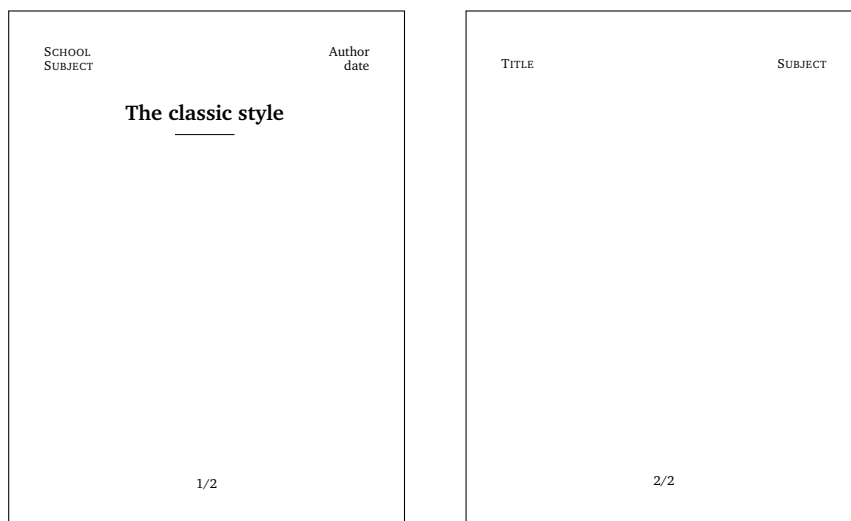
`\correct`   To typeset a correct version of an exercise sheet, we provide the `\correct` macro, which adds " – Correct Version" to the title. It should be placed in the preamble. When used with packages that manage multiple versions of a document, this macro eliminates the need to define distinct titles for an exercise sheet an its correct version. However in the **exam** style, the text "Correct version" replaces the subtitle instead of being added in the main title (except in headers).

`\makesmalltitle`   Inspired by the package phfnote by Philippe Faist, we also offer a compact title format. This format combines the details from `\title`, `\subject` and `\date` into a single line, depending on the chosen style (see schooldocs-examples.pdf). The rule is always displayed and spans the entire line width.
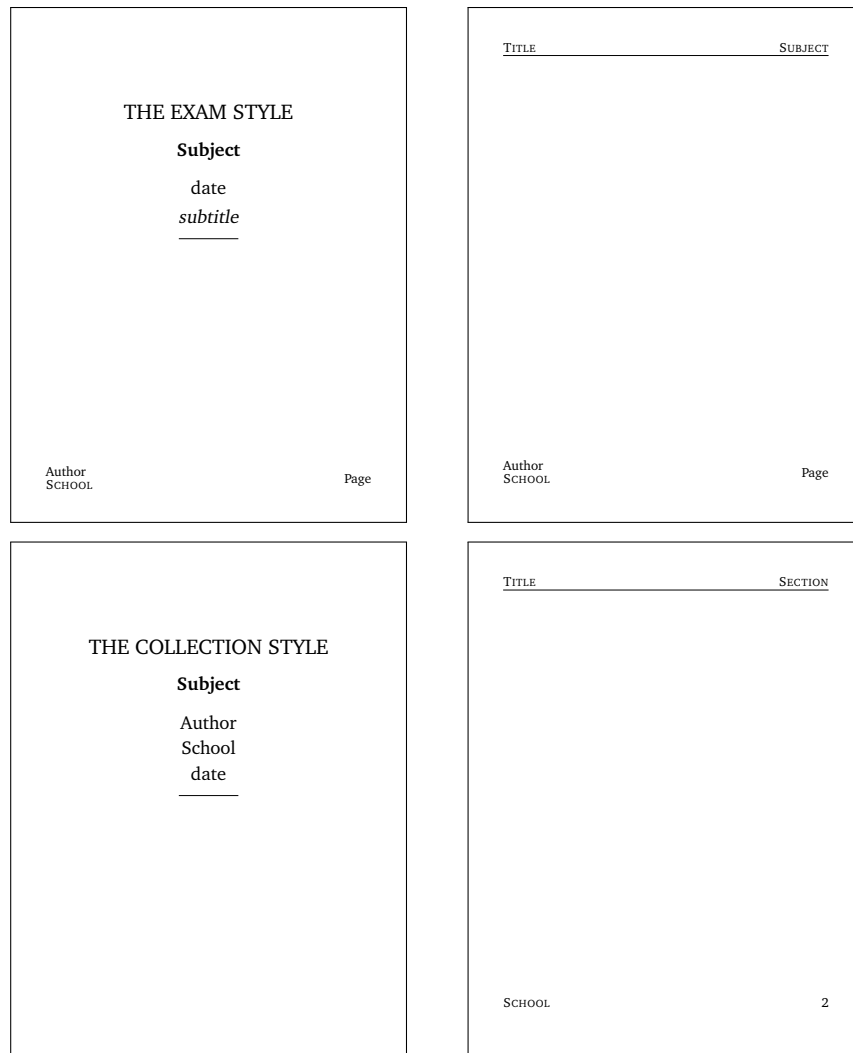
2.4   Style layouts

In accordance with typographic good practices, the header on the title page is usually left empty (see The LaTeX Companion). However, this "rule" is often disregarded in school documents. On the first page, it is common to find information such as author, school, etc., at the top left and the date at the top right, resembling the layout of a letter. While we adhere to good practices for the headers (except in the **classic** style), we still include certain information in the footer.

Below, we present miniature previews illustrating the six styles layout. The file schooldocs-examples.pdf provides an actual representation. In several styles, a rule is placed below the header. It can be displayed or removed by setting its width, and the same applies to a rule above the footer. The formatting of each element, as well as specific spacing settings, can be freely customized as detailed in 3.3.

The elegant style

Subject
date
———

The modern style

Subject
———

The soft style
———

The **collection** style is well-suited for longer documents. In this style the name of the current section is displayed in the right header and updates as the content progresses, similar to the behavior 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 `\geometry` macro of the package `geometry` (by Hideo Umeki and David Carlisle). Following good typographic practice (see the LaTeX Companion, the `typearea` package or the `KOMA-Script` bundle documentation), the ratio between the text body (referred to as the "type area" 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. However, for school documents, this setting

seems to result in excessive white space in the margins. Thus we have adjusted this ratio to 0.75. You can modify it using the `\newgeometry` command[4].

Moreover, in accordance with "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 appears that this recommended 1:2 ratio is rarely observed, as it results in an overly wide bottom margin. Additionally, when loading the `geometry` package, the default vertical ratio is set at 2:3 and not 1:2. To achieve more balanced margins, we have preferred to set it at 3:4, using `\geometry{scale=0.75,vmarginratio=3:4,heightrounded}`[5].

3.2   Title settings

Several parameters allow for customizing the title composition. They are presented in the table below along with their default settings. Colors can be altered using `\definecolor`, macros using `\renewcommand` and lengths using `\setlength`. Most command names are self-explanatory and don't require additional information about their usage. The `\titleflush` command handles alignment: it is centered by default, but can be left-aligned using `\renewcommand{\titleflush}{flushleft}` (`flushright` for right alignment)[6].

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

Unless specified otherwise, the "special settings" column in the following table applies to the **exam** and **collection** styles.

Parameter	Default settings	Special settings
`titlecolor`	`black`	
`\titlestyle`	`\LARGE\bfseries`	`\LARGE\MakeUppercase`
`\subjectstyle`	`\large`	`\Large\bfseries`
`\datestyle`	`\large`	
`\smalltitledatestyle`	`\large\slshape`	
`\titleflush`	`center`	
`\titletopskip`	-1.32 cm	-0.67 cm (**classic, soft**), 0.67 cm
`\smalltitletopskip`	-1.32 cm	
`\titlebottomskip`	`\medskipamount`	
`\titlesep`	`2\medskipamount`	`2\bigskipamount`
`\seprulewidth`	0.3 pt	
`\seprulelength`	2.5 cm	

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

`\authorstyle`   In the **collection** style, the *school* and *author* fields are incorporated into the title. Their attributes are governed by `\authorstyle`[7] which is set to `\Large`.

To create a separate title page (especially for the **exam** or **collection** styles), you can enclose `\maketitle` within the `titlepage` environment provided by LaTeX.

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[4]You can also call `geometry` before `schooldocs`. Setting the scale factor several times doesn't work.

[5]The `heightrounded` option rounds text height to a multiple of n times the height of a line (where n is an integer), preventing occurrences of "underfull vbox" at times.

[6]This macro has no effect with the **exam** and **collection** styles, where the title is always centered.

[7]In other styles, the `\authorstyle` macro (set to `\textnormal`) is utilized within header or footer.

`\boxedshape` A specific formatting has been predefined to create a lightly 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 you want to achieve this kind of effect, for instance:

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

3.3   Headers and footers

The typesetting of headers and footers is achieved using specialized macros[8] from the `fancyhdr` package. Similar to the title, various macros enable customization of specific settings. They are outlined in the table below. Note that `\pagenamestyle` determines the format of the word "*page*" displayed preceding the page number.

The `\headstyle` and `\footstyle` commands are common for all headers and footers components, respectively. These commands are combined with macros that provide distinct settings for each individual field.

Parameter	Default setting
headingcolor	black
\headstyle	\small\color{headingcolor}
\footstyle	\small\color{headingcolor}
\headtitlestyle	\scshape
\headsubjectstyle	\scshape
\schoolstyle	\scshape
\headdatestyle	\textnormal
\authorstyle	\textnormal
\pagenamestyle	\textnormal

Macros that enable the display (or removal) of the rule in the header[9] or the footer are provided by the `fancyhdr` package. For example, in any style, the header rule can be removed using: `\renewcommand{\headrulewidth}{0pt}`, and it can be displayed in the footer with: `\renewcommand\footrulewidth{0.4pt}`.

3.4   Internationalization

Three keywords are utilized by the package: *page*, *Correct version*, and *Name*, defined by the macros `\pagename`, `\correctname` and `\identityname`. `\pagename` is used in the header or footer, `\correctname` by the `\correct` macro and `\identityname` by the **identity** style. These keywords are automatically translated into a few languages[10] based on the selected language using the `babel` or `polyglossia` package. They can be redefined using `\renewcommand`, or you can also utilize macros from Clemens Niederberger's `translations` package (allowing dynamic language changes), such as `\DeclareTranslation{romanian}{pagin\u{a}}` (in the preamble).

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[8]The `fancyhdr` package offers the commands `\lhead`, `\chead`, `\rhead` for the left, center and right portions of the header, and similarly for the footer: `\lfoot`, `\cfoot` and `\rfoot`.

[9]In fact, we have redefined the `\headrule` macro so that the rule never appears on the first page.

[10]Translation is currently built 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 the 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 previously loaded, we do not load it again to prevent conflict with options.

To modify the scale factor, utilize \newgeometry as the \geometry command will not function when the scale is already set.

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
```

Whether in French or German, the word that translates 'correctname' contains an accented letter. The `\correct` macro will add this translated word to the title. However, when compiling with pdfLaTeX and using the hyperref package, the encoding of these accented characters might be incorrect in the PDF metadata. In this case, compile with X⅃LaTeX or add `\renewcommand\correctname{...}` in the preamble.

4.3 Information fields

The PDF information fields are automatically filled in using the information macros, but this only works in the preamble, hence the test `\ifx@onlypreamble@notprerr`. This allows using these macros outside the preamble, which is the normal behavior for `\title`, `\date`, `\author`, etc. with the 'article' class.

Once defined, information fields are initially set to empty to ensure that tests for empty fields work correctly.

```
44 \renewcommand{\title}[2][]{\long\def\@title{#2}
45     \ifthenelse{\equal{#1}{}}{\def\@headtitle{#2}}{\def\@headtitle{#1}}
46     \ifx\@onlypreamble\@notprerr\else
47         \@ifpackageloaded{hyperref}{\hypersetup{pdftitle={\@headtitle}}}{}
48     \fi
49 }
50 \title{}
51 \author{}
52
53 \newcommand\school[1]{\long\def\@school{#1}
54     \ifx\@onlypreamble\@notprerr\else
55         \@ifpackageloaded{hyperref}{
56             \hypersetup{pdfauthor={\@author\ (\@school)}}}{}
57     \fi
58 }
59 \school{}
60 \newcommand{\institute}{\school}
61
62 \let\subject\relax
63 \newcommand{\subject}[2][]{\long\def\@subject{#2}
64     \ifthenelse{\equal{#1}{}}{\def\@headsubject{#2}}{\def\@headsubject{#1}}
65     \ifx\@onlypreamble\@notprerr\else
66         \@ifpackageloaded{hyperref}{\hypersetup{pdfsubject={\@headsubject}}}{}
67     \fi
68 }
69 \def\@subject{}
70 \def\@headsubject{}
```

Due to the usage of the `\subject` macro by the KOMA-Script package, we include a `\relax` command before defining this macro.

The `\subject{}` command doesn't function properly with the `\@empty` test employed below in the `\maketitle` command. Consequently, we define `\@subject` and `\@headsubject` as empty by default.

4.4 Settings

First we present the title settings.

```
71 \definecolor{titlecolor}{named}{black}
```

```
72 \newcommand{\titlestyle}{\LARGE\bfseries}
73 \newcommand{\subjectstyle}{\large}
74 \newcommand{\datestyle}{\large}
75 \newcommand{\smalltitledatestyle}{\large\slshape}
76 \newcommand{\titleflush}{center}
77 \newlength{\titletopskip} \setlength{\titletopskip}{-1.32cm}
78 \newlength{\smalltitletopskip} \setlength{\smalltitletopskip}{-1.32cm}
79 \newlength{\titlesep} \setlength{\titlesep}{2\medskipamount}
80 \newlength{\titlebottomskip} \setlength{\titlebottomskip}{\medskipamount}
81 \newlength{\seprulewidth} \setlength{\seprulewidth}{0.3pt}
82 \newlength{\seprulelength} \setlength{\seprulelength}{2.5cm}
83
84 \newcommand{\boxedshape}[1]{%
85     \color{gray} % no effect
86     \setlength{\fboxsep}{4.5pt}
87     \setlength{\shadowsize}{3pt}
88     \shadowbox{\quad\textcolor{titlecolor}{\rule{0pt}{2ex}#1}\quad}
89 }
90
```

The default value for \fboxsep is 3 pt and for \shadowsize it's 4 pt. These settings have a local scope.

Then, we move on to the settings for headers and footers.

```
91 \definecolor{headingcolor}{named}{black}
92 \newcommand{\headstyle}{\small\color{headingcolor}}
93 \newcommand{\footstyle}{\small\color{headingcolor}}
94 \newcommand{\headtitlestyle}{\scshape}
95 \newcommand{\headsubjectstyle}{\scshape}
96 \newcommand{\schoolstyle}{\scshape}
97 \newcommand{\headdatestyle}{\textnormal}
98 \newcommand{\authorstyle}{\textnormal}
99 \newcommand{\pagenamestyle}{\textnormal}
100 \setlength{\headheight}{\baselineskip}
101 \renewcommand{\headrule}{\ifthenelse{\thepage=1}%
102     {\vspace{-2ex}\rule{\headwidth}{0pt}}%
103     {\vspace{-2ex}\rule{\headwidth}{\headrulewidth}}}
104 }
105
```

The redefinition of the \headrule macro allows for the removal of the rule on the first page.

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

4.5 Title composition

The first macro, \schooldocstitles, aims to define the default composition of titles. Several styles redefine their own title composition. This macro allows, when using \maketitle multiple times at different places in the document, to revert to the default definition when a style has modified the title definition.

```
106 \newcommand{\schooldocstitles}{
107     \renewcommand{\maketitle}[1][\seprulelength]{
108         \newpage\mbox{}\par\vspace{\titletopskip}
```

```
109          \begin{titleflush}
110              {\color{titlecolor}
111              {\titlestyle{\@title}}
112              \ifx\@subject\@empty\else
113                  \par\vspace{\titlesep}\subjectstyle\@subject
114              \fi
115              \ifthenelse{\equal{\@date}{}}{}{%
116                  \par\vspace{0.5\titlesep} \datestyle\@date}
117              \par\vspace{0.5\titlesep}
118              }
119              \ifthenelse{\lengthtest{##1 > 0cm}}{\rule{##1}{\seprulewidth}}{}
120          \end{titleflush}
121          \vspace{\titlebottomskip}
122      }
123
124      \let\makesmalltitle\relax
125      \newcommand{\makesmalltitle}{
126          \newpage\mbox{}\par\vspace{\smalltitletopskip}
127          \begin{center}
128              {\color{titlecolor}
129              {\titlestyle{\@title}}
130              \hfill \subjectstyle\@subject
131              \ifthenelse{\equal{\@date}{}}{}{%
132                  \enskip --\enskip \smalltitledatestyle\@date}
133              }
134              \rule{\linewidth}{\seprulewidth}
135          \end{center}
136          \vspace{\titlebottomskip}
137      }
138
139      \let\correct\relax
140      \newcommand\correct{%
141          \let\@originalheadtitle\@headtitle
142          \def\@headtitle{\@originalheadtitle ~--~\correctname}
143          \ifx\@onlypreamble\@notprerr\else
144              \@ifpackageloaded{hyperref}{%
145                  \AtBeginDocument{\hypersetup{pdftitle={\@headtitle}}}}{}
146          \fi
147          \let\@originaltitle\@title
148          \def\@title{\@originaltitle ~--~\correctname}
149      }
150 }
151 \schooldocstitles
152
153 \newcommand{\seprule}[1][\seprulelength]{\begin{center}
154     \raisebox{0.25\baselineskip}{\rule{#1}{\seprulewidth}}\end{center}}
155
```

4.6   Basic styles

In the **classic** style, the header is displayed on two lines, thus requiring an increase
in the \headheight.
    To include the header or footer into the total body, add \geometry{includehead}

or \geometry{includefoot} in the preamble.
```
156 \fancypagestyle{classic}{%
157     \renewcommand{\headrulewidth}{0pt}
158     \addtolength{\headheight}{\baselineskip}
159     \lhead{\headstyle\ifthenelse{\thepage=1}{\schoolstyle\@school\mbox{}\\
160         \headsubjectstyle\@subject}{\headtitlestyle\@headtitle} }
161     \rhead{\headstyle\ifthenelse{\thepage=1}{\authorstyle\@author\mbox{}\\
162         \headdatestyle\@date}{\headsubjectstyle\@headsubject}}
163     \cfoot{\footstyle \thepage /\pageref{LastPage}}
164     \setlength{\titletopskip}{-0.67cm}
165     \renewcommand{\maketitle}[1][\seprulelength]{%
166         \newpage\mbox{}\par\vspace{\titletopskip}
167         \begin{titleflush}
168             {\color{titlecolor}\titlestyle{\@title}}
169             \par\vspace{0.5\titlesep}
170             \ifthenelse{\lengthtest{##1>0cm}}{\rule{##1}{\seprulewidth}}{}
171         \end{titleflush}
172         \vspace{\titlebottomskip}
173     }
174     \renewcommand{\makesmalltitle}{
175         \newpage\mbox{}\par\vspace{\smalltitletopskip}
176         \begin{center}
177             {\color{titlecolor}
178             {\titlestyle{\@title}}
179             \hfill \subjectstyle\@subject
180             }
181             \rule{\linewidth}{\seprulewidth}
182         \end{center}
183         \vspace{\titlebottomskip}
184     }
185 }
186
187 \fancypagestyle{elegant}{%
188     \renewcommand{\headrulewidth}{0pt}
189     \lhead{\headstyle
190         \ifthenelse{\thepage=1}{}{\headtitlestyle\@headtitle}}
191     \rhead{\headstyle
192         \ifthenelse{\thepage=1}{}{%
193         \pagenamestyle\pagename~\thepage /\pageref{LastPage}}}
194     \lfoot{\ifthenelse{\thepage=1}{\footstyle\schoolstyle\@school}{}}
195     \cfoot{}
196     \rfoot{\ifthenelse{\thepage=1}{\footstyle\authorstyle\@author}{}}
197 }
198
199 \fancypagestyle{modern}{%
200     \lhead{\headstyle
201         \ifthenelse{\thepage=1}{}{\headtitlestyle\@headtitle}}
202     \rhead{\headstyle
203         \ifthenelse{\thepage=1}{}{\headsubjectstyle\@headsubject}}
204     \lfoot{\ifthenelse{\thepage=1}{\footstyle\schoolstyle\@school}{}}
205     \cfoot{\ifthenelse{\thepage=1}{}{
206         \footstyle\thepage /\pageref{LastPage}}}
207     \rfoot{\footstyle\ifthenelse{\thepage=1}{%
208         \authorstyle\@author
```

```
209        \ifx\@author\empty\else\\ \fi
210        \headdatestyle\@date\ignorespaces}{}
211    }
212    \renewcommand{\maketitle}[1][\seprulelength]{%
213        \newpage\mbox{}\par\vspace{\titletopskip}
214        \begin{titleflush}
215            {\color{titlecolor}
216            {\titlestyle{\@title}}
217            \ifx\@subject\@empty\else
218                \par\vspace{\titlesep}\subjectstyle\@subject
219            \fi
220            \par\vspace{0.5\titlesep}
221            }
222            \ifthenelse{\lengthtest{##1>0cm}}{\rule{##1}{\seprulewidth}}{}
223        \end{titleflush}
224        \vspace{\titlebottomskip}
225    }
226    \renewcommand{\makesmalltitle}{
227        \newpage\mbox{}\par\vspace{\smalltitletopskip}
228        \begin{center}
229            {\color{titlecolor}
230            {\titlestyle{\@title}}
231            \hfill \subjectstyle\@subject
232            }
233            \rule{\linewidth}{\seprulewidth}
234        \end{center}
235        \vspace{\titlebottomskip}
236    }
237 }
238
239 \fancypagestyle{soft}{%
240    \lhead{\headstyle
241        \ifthenelse{\thepage=1}{}{\headtitlestyle\@headtitle}}
242    \rhead{\headstyle
243        \ifthenelse{\thepage=1}{}{%
244        \pagenamestyle\pagename~\thepage /\pageref{LastPage}}}
245    \lfoot{\footstyle{\schoolstyle\@school}
246        \ifthenelse{\thepage=1}{\ifx\@author\empty\else\\ \fi
247            \authorstyle\@author}{}
248    }
249    \cfoot{}
250    \rfoot{\footstyle{\headsubjectstyle\@headsubject}
251        \ifthenelse{\thepage=1}{\ifx\@date\empty\else\\ \fi
252            \headdatestyle\@date\ignorespaces}{}
253    }
254    \setlength{\titletopskip}{-0.67cm}
255    \renewcommand{\maketitle}[1][\seprulelength]{%
256        \newpage\mbox{}\par\vspace{\titletopskip}
257        \begin{titleflush}
258            {\color{titlecolor}\titlestyle{\@title}}
259            \par\vspace{0.5\titlesep}
260            \ifthenelse{\lengthtest{##1>0cm}}{\rule{##1}{\seprulewidth}}{}
261        \end{titleflush}
262        \vspace{\titlebottomskip}
```

```latex
263      }
264      \renewcommand{\makesmalltitle}{
265          \newpage\mbox{}\par\vspace{\smalltitletopskip}
266          \begin{center}
267              {\color{titlecolor}
268              {\titlestyle{\@title}}
269              \hfill \mbox{}
270              }
271              \rule{\linewidth}{\seprulewidth}
272          \end{center}
273          \vspace{\titlebottomskip}
274      }
275 }
276
277 \fancypagestyle{identity}{%
278      \lhead{\headstyle\headtitlestyle \identityname}
279      \chead{}
280      \rhead{}
281      }
282
```

4.7 Extended styles

```latex
283 \fancypagestyle{exam}{%
284      \let\subtitle\relax % because KOMA-Script uses it
285      \newcommand\subtitle[1]{\long\def\@subtitle{##1}}
286      \subtitle{}
287      \lhead{\headstyle
288          \ifthenelse{\thepage=1}{}{\headtitlestyle{\@headtitle}}}
289      \rhead{\headstyle
290          \ifthenelse{\thepage=1}{}{\headsubjectstyle\@headsubject}}
291      \lfoot{\footstyle
292          \authorstyle\@author
293          \ifx\@author\empty\else\\ \fi
294          \schoolstyle\@school
295      }
296      \cfoot{}
297      \rfoot{\footstyle \pagenamestyle\pagename~\thepage/\pageref{LastPage}}
298      \setlength{\titletopskip}{0.67cm}
299      \setlength{\titlesep}{2\bigskipamount}
300      \renewcommand{\titlestyle}{\LARGE\MakeUppercase}
301      \renewcommand{\subjectstyle}{\Large\bfseries}
302      \let\subtitlestyle\relax
303      \newcommand{\subtitlestyle}{\large\slshape}
304      \let\titlecorrectstyle\relax
305      \newcommand*{\titlecorrectstyle}{\color{red}\large\scshape}
306      \renewcommand\correct{%
307          \let\@originalheadtitle\@headtitle
308          \def\@headtitle{\@originalheadtitle ~--~\correctname}
309          \ifx\@onlypreamble\@notprerr\else
310              \@ifpackageloaded{hyperref}{%
311                  \AtBeginDocument{\hypersetup{pdftitle={\@headtitle}}}}{}
312          \fi
313          \renewcommand{\subtitlestyle}{\titlecorrectstyle}
```

```
314            \subtitle{\correctname}
315      }
316      \renewcommand{\maketitle}[1][\seprulelength]{%
317          \newpage\mbox{}\par\vspace{\titletopskip}
318          \begin{center}
319              {\color{titlecolor}
320              {\titlestyle{\@title}}
321              \par\vspace{\titlesep}{\subjectstyle \@subject}
322              \par\vspace{\titlesep}
323              \ifthenelse{\equal{\@date}{}}{}{%
324                  \datestyle\@date\par\vspace{0.5\titlesep}}
325              \ifthenelse{\equal{\@subtitle}{}}{}{%
326                  \subtitlestyle\@subtitle\par\vspace{0.5\titlesep}
327              }
328              }
329              \ifthenelse{\lengthtest{##1>0cm}}{\rule{##1}{\seprulewidth}}{}
330          \end{center}
331          \vspace{\titlebottomskip}
332      }
333 }
334
335 \fancypagestyle{collection}{%
336      \lhead{\headstyle\headtitlestyle\@headtitle}
337      \ifx\@onlypreamble\@notprerr
338          \renewcommand{\sectionmark}[1]{\markboth{##1}{}}
339      \else
340          \AtBeginDocument{\renewcommand{\sectionmark}[1]{\markboth{##1}{}}}
341      \fi
342      \rhead{\headstyle\headsubjectstyle\leftmark} %\@section
343      \lfoot{\footstyle\schoolstyle \@school}
344      \cfoot{}
345      \rfoot{\footstyle\thepage}
346      \setlength{\titletopskip}{0.67cm}
347      \setlength{\titlesep}{2\bigskipamount}
348      \renewcommand{\titlestyle}{\LARGE\MakeUppercase}
349      \renewcommand{\subjectstyle}{\Large\bfseries}
350      \renewcommand{\authorstyle}{\Large}
351      \renewcommand{\datestyle}{\Large}
352      \renewcommand{\maketitle}[1][\seprulelength]{%
353          \thispagestyle{empty}
354          \newpage\mbox{}\par\vspace{\titletopskip}
355          \begin{center}
356              {\color{titlecolor}
357              {\titlestyle{\@title}}
358              \par\vspace{\titlesep} {\subjectstyle{\@subject}}
359              \par\vspace{\titlesep}
360              \ifx\@author\empty
361              \else \authorstyle
362                  \begin{tabular}[t]{c}\@author\end{tabular}
363                  \ifx\@school\empty\else\par\vspace{1ex} \@school\fi
364                  \par\vspace{0.5\titlesep}
365              \fi
366              \ifthenelse{\equal{\@date}{}}{}{%
367                  \datestyle\@date \par\vspace{0.5\titlesep}}
```

```
368              }
369              \ifthenelse{\lengthtest{##1>0cm}}{\rule{##1}{\seprulewidth}}{}
370          \end{center}
371          \vspace{\titlebottomskip}
372      }
373 }
```

In the **collection** style, we redefine \sectionmark using \AtBeginDocument to prevent a possible redefinition of \headtitlestyle as \MakeUppercase from removing the section number (alternatively, you can use \nouppercase here).

The \ifthenelse command doesn't function properly when \and is used within \author.

Note the \pagestyle{empty} command in \maketitle, which ensures that there is no header on the first page.