

styles package  
For cleaner reports

Benjamin Stambach

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1. TABLE OF APPENDICES

A Different Page Styles

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# I. Package Options

## INTRODUCTION

This document provides detailed explanations of the options available in the custom LaTeX package `styles`. Each option is described with its possible values and the effects on document formatting and behavior.

### 1. OPTIONS OVERVIEW

#### 1. *NewChapPage*

- **Possible Values:** `true`, `false`, or empty.
- **Effect:** Controls whether a new chapter starts on a new page.

#### 2. *ChapPrefix*

- **Possible Values:** Any string.
- **Effect:** Adds a prefix before the chapter title for customization.

#### 3. *titlenum*

- **Possible Values:**
  - 0 (default): No additional numbering style.
  - 1: Roman numeral chapters, Arabic sections.
  - 2: Roman chapters, alphabetic subsections.
  - 3: Roman chapters, alphabetic subsections, Arabic subsubsections.
- **Effect:** Determines the numbering style for chapters and sections.

#### 4. ***fancytitle***

- **Possible Values:**
  - 0 (default): No special title formatting.
  - 1: Bold, large fonts.
  - 2: Bold, large fonts with colored chapter titles.
  - 3: Larger fonts with style 1 formatting.
- **Effect:** Controls visual styling of titles throughout the document.

#### 5. ***fancypage***

- **Possible Values:**
  - 0 (default): No special page formatting.
  - 1: Document title in the header, page numbers in the footer.
  - 2: Includes author name and logo in the header.
  - 3: Variant of 2 with different page number placement.
  - 4: Customized header and footer placement.
- **Effect:** Configures header and footer layout, including logos and titles.

#### 6. ***logo***

- **Possible Values:**
  - no (default): No logo.
  - path/to/logo: Path to a logo file for the header.
- **Effect:** Specifies a logo for the document's header.
- **Note:** The logo should be horizontal, not square.

#### 7. ***name***

- **Possible Values:** Any string.
- **Effect:** Sets the author's name or any other name to be included in the header.

## 8. *titre*

- **Possible Values:** Any string.
- **Effect:** Sets the title text in the header.

## 9. *fancyfooter*

- **Possible Values:** Any string.
- **Effect:** Defines custom footer text for each page.

## 2. ERROR HANDLING

- Invalid or unsupported options trigger an error message, ensuring only valid options are used.

## 3. DEFAULT SETTINGS

- **Default Chapter Prefix:** No prefix.
- **Default Title Numbering:** 0 (no additional numbering).
- **Default Fancy Title:** 0 (no special title styling).
- **Default Fancy Page:** 0 (standard page layout).
- **Default Logo Path:** no (no logo).

## II. Dependencies

### INTRODUCTION

This chapter explains the dependencies used in the `styles` package, focusing on their purpose and key commands. It covers the `titlesec`, `titletoc`, and `titleps` packages, essential for customizing section titles, TOC entries, and page styles.

### 1. BASE PACKAGE DEPENDENCIES

#### 1. *xkeyval*

- **Purpose:** Extends the `keyval` package for handling key-value pairs.
- **Main Commands:**
  - `\DeclareOptionX{key}[default]{definition}`: Declares an option.
  - `\ProcessOptionsX{}`: Processes declared options.

#### 2. *ifthen*

- **Purpose:** Provides conditional commands based on boolean expressions.
- **Main Command:**
  - `\ifthenelse{<condition>}{<true part>}{<false part>}`: Executes code based on a condition.



### 3. *etoolbox*

- **Purpose:** A toolbox package for managing boolean variables and toggles.
- **Main Commands:**
  - `\newtoggle{<name>}`: Creates a new toggle.
  - `\toggletrue{<name>}` / `\togglefalse{<name>}`: Sets the toggle state.
  - `\iftoggle{<name>}{<true part>}{<false part>}`: Executes code based on toggle state.

### 4. *titlesec*

- **Purpose:** Customizes sectioning commands.
- **Main Commands:**
  - `\titleformat{<command>}{<format>}{<label>}{<sep>}{<before>}{<after>}`: Customizes title formatting.
  - `\titlespacing*{<command>}{<left>}{<before>}{<after>}`: Adjusts title spacing.

### 5. *titletoc*

- **Purpose:** Controls TOC layout and formatting.
- **Main Command:**
  - `\titlecontents{<section>}[<left>]{<above>}{<numbered>}{<numberless>}{<filler>}[<below>]`: Customizes TOC entries.

### 6. *titleps*

- **Purpose:** Customizes page styles, including headers and footers.
- **Main Commands:**
  - `\newpagestyle{<name>}{<definition>}`: Defines a custom page style.
  - `\sethead{<left>}{<center>}{<right>}`: Defines header content.
  - `\setfoot{<left>}{<center>}{<right>}`: Defines footer content.
  - `\setheadrule{<thickness>}`: Sets header rule thickness.

# III. Commands

## INTRODUCTION

This chapter details the new commands and features defined in the `styles` package, covering boxed environments, title formatting, section auto-skipping, and other key features.

### 1. NEW COMMANDS AND FEATURES

#### 1. *Boxed Environments*

- `\newtcolorbox[] {defbox} [1] [] {...}`: Creates a red `tcolorbox` for definitions.
- `\newtcolorbox{exbox} {...}`: Creates a green `tcolorbox` for examples.
- `\newtcolorbox{rembox} {...}`: Creates a blue `tcolorbox` for remarks.
- `\tbox{#1} {#2}`: Creates a `tcolorbox` with styling defined by #1.

#### 2. *Variable New Page Command*

- `\varnewpage{#1}`: Creates a new page if there isn't enough space for #1 lines on the current page.

#### 3. *Section Auto-Skipping*

- `\resetsecautoskip`: Resets section commands to their original behavior.

#### 4. *Title Numeration Styles*

- `titlenum = 1`: Roman numerals for chapters, Arabic for sections.
- `titlenum = 2`: Roman chapters, alphabetic subsections.
- `titlenum = 3`: Roman chapters, Arabic sections, capital letter subsections.

#### 5. *Title Formatting Styles*

- `fancytitle = 1`: Basic style with bold and large fonts.
- `fancytitle = 2`: Color scheme with `MidnightBlue` for chapter titles.
- `fancytitle = 3`: Larger fonts with style 1 formatting.

#### 6. *Title Spacing*

- `\titlespacing*{\command}{left}{before-sep}{after-sep}[right-sep]`: Adjusts title spacing.

#### 7. *Page Style Management*

- `\newcpage`: Inserts a clear page before each chapter.
- `\headlogo`: Defines the logo in the page header.
- `\renewpagestyle{main}{...}`: Defines the main page style.
- `\renewpagestyle{debut}{...}`: Defines the introductory page style.

#### 8. *TOC Customization*

- `\deflen{name}{length}`: Defines a new length variable.
- Custom lengths include:
  - `lenlabelsec`: Length for section labels.
  - `lenlabelsbsec`: Length for subsection labels.
  - `lenlabelsbbsubsec`: Length for subsubsection labels.
  - `lenlabelpara`: Length for paragraph labels.
  - `leftspacechapter`: Left indentation for chapters in the TOC.
- `\titlecontents{section} ...`: Customizes TOC entries.

## **9.    *Acronym Counter Reset***

- `\resetacrocounter`: Resets acronym counters at the beginning of each chapter.

# **Appendices**

### A.1 DEFAULT STYLE

# Chapter 1

## Introduction

This document demonstrates the default look. ChapPrefix does not work

### 1.1 First Section

The header includes the author's name, and the footer displays a custom message.

#### 1.1.1 Subsection Example

Subsections are displayed with the configured header and footer styles.

##### 1.1.1.1 SubSubsection

## A. DIFFERENT PAGE STYLES

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### A.2 EXAMPLE 1

#### I. INTRODUCTION

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## I. Introduction

This document demonstrates the styles:

- `fancy page=1`
- `titlenum=1`
- `fancytitle=1`

### 1. FIRST SECTION

The header includes the author's name, and the footer displays a custom message.

#### ***1.1 Subsection Example***

Subsections are displayed with the configured header and footer styles.

##### ***1.1.A SubSubsection***

*paragraph :*

### A.3 EXAMPLE 2

BenjaminStambach



## Project I: Introduction

This document demonstrates the styles:

- `fancy page=2`
- `titlenum=2`
- `fancytitle=2`
- `name=Benjamin Stambach`
- `logo=insas_logo.png`
- `fancyfooter=Confidential`
- `ChapPrefix=Project`

### 1. FIRST SECTION

The header includes the author's name, and the footer displays a custom message.

#### 1.a *Subsection Example*

Subsections are displayed with the configured header and footer styles.

##### i. *SubSubsection*

*a) paragraph :*



## A. DIFFERENT PAGE STYLES

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### A.4 EXAMPLE 3

#### I. INTRODUCTION

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## I. Introduction

This document demonstrates the styles:

- `fancypage=3`
- `titlenum=3`
- `fancytitle=3`
- `NewChapPage=false`

### 1. FIRST SECTION

The header includes the author's name, and the footer displays a custom message.

#### A. *Subsection Example*

Subsections are displayed with the configured header and footer styles.

#### 1. SUBSUBSECTION

## II. Another Chapter

chapters continuing on the same page  
Per default, this is not the case.

### A.5 EXAMPLE 4

Benjamin Stambach



## I. Introduction

This document demonstrates the styles:

- `fancy page=3`
- `titlenum=3`
- **`fancytitle=4`**
- `NewChapPage=false`

### 1. FIRST SECTION

The header includes the author's name, and the footer displays a custom message.

#### A. *Subsection Example*

Subsections are displayed with the configured header and footer styles.

##### 1. SUBSUBSECTION

*paragraph* : jfizqeomfiqzeom

### A.5 EXAMPLE 4

Benjamin Stambach

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## II. Another Chapter

Per default, the chapter is on the top of the next page