# LATEX-WordFeel template

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*A LATEX template that mimics Microsoft Word's look and feel.*

## Contents

# 1   Introduction

LATEX-WordFeel is a LATEX imitation of Microsoft Word 2019's default template "`Normal.dotm`".

# 2   Compatibility

This template is designed solely for X∃LATEX due to its ability to use TrueType/OpenType fonts directly and its excellent Unicode support. Please be aware that pdfLATEX is not supported.

# 3   Style definition

## 3.1   Page

LATEX-WordFeel uses the default paper size of `article` class in your LATEX distribution, which may be either A4 paper or Letter paper. To specify a paper size explicitly, pass [`a4paper`] or [`letterpaper`] to `\documentclass{wordfeel}`.

Page margin is set as in Table 1. If you want to change page margin, you can use the "geometry" package. Please refer to `http://mirrors.ctan.org/macros/latex/contrib/geometry/geometry.pdf` for the manual.

Table 1: Page margin definitions

| Dimension | Value |
| --- | --- |
| Gutter | 0 inch |
| Top margin | 1 inch |
| Left margin | 1 inch |
| Right margin | 1 inch |
| Bottom margin | 1 inch |
| Header from top | 0.5 inch |
| Footer from bottom | 0.5 inch |

## 3.2   Paragraph

### 3.2.1   Line spacing

LATEX-WordFeel uses multiple line spacing at 1.08×, which is the default in the United States version of Microsoft Word. To disable multi line spacing, use "`\linespread{1}`" in your document preamble.

### 3.2.2   Margin and indentation

LATEX-WordFeel adds 8 bp of margin after each paragram, which is the default in the United States version of Microsoft Word. To disable paragraph margin, use "`\setlength{\parskip}{0pt}`" in your document preamble.

LATEX-WordFeel comes with no paragraph indentation by default. To enable paragraph indentation, use "`\setlength{\parindent}{0.5in}`" in your document preamble.

### 3.2.3   Justification

LATEX-WordFeel uses justification with automatic hyphenation, although Microsoft Word does not enable automatic hyphenation by default. If you want to align to left instead, use "`\raggedright`" in your document preamble. You can also use the package "`ragged2e`" to enable advanced justification control.

### 3.3   Fonts

#### 3.3.1   Font families

LaTeX-WordFeel uses the same font families as in Microsoft Word, listed in Table 2.  Please note that you need to own a legal copy of these fonts to use this template.

Table 2: Font families

| Letter form | Font family |
|---|---|
| Sans-serif (Default) | Calibri |
| Serif | Cambria |
| `Monospace` | `Consolas` (scaled by 94.72% to match ex-height) |
| *Math* | *Cambria Math* |

#### 3.3.2   Font sizes

The default font size is 11 bp. You may pass either `[10pt]`, `[11pt]`, or `[12pt]` to `\documentclass{word feel}` to select 10 bp, 11 bp, or 12 bp as the default font size.

In LaTeX, 1 inch = 72 bp = 72.27 pt, while in Microsoft Word, 1 inch = 72 pt.  Therefore you will need to use "bp" if you want your document to look similar to Microsoft Word's output.

The LaTeX font size macros are adjusted according to default font size, shown in Table 3.

Table 3: Font sizes

| Macro name | `[10pt]` | `[11pt]` | `[12pt]` |
|---|---|---|---|
| `\tiny` | 5 bp | 6.5 bp | 6.5 bp |
| `\scriptsize` | 6.5 bp | 8 bp | 8 bp |
| `\footnotesize` | 8 bp | 9 bp | 10 bp |
| `\small` | 9 bp | 10 bp | 11 bp |
| `\normalsize` | 10 bp | 11 bp | 12 bp |
| `\large` | 12 bp | 12 bp | 14 bp |
| `\Large` | 14 bp | 14 bp | 18 bp |
| `\LARGE` | 18 bp | 18 bp | 20 bp |
| `\huge` | 20 bp | 20 bp | 24 bp |
| `\Huge` | 24 bp | 24 bp | 26 bp |

Font metrics are set according to Calibri font, shown in Table 4. Thse parameters controls line spacing and will not change even if you temporarily switch to another font family.

Table 4: Calibri font metrics

| Metric | Value |
|---|---|
| Line height | 2500 |
| Ascent | 1950 |
| Descent | 550 |
| EM-size | 2048 |
| Ex-size | 951 |

### 3.3.3 Ligatures

OpenType ligatures are enabled in LATEX-WordFeel, although it is not enabled by Microsoft Word by default.

Calibri supports the following "Common"-category ligatures:

fb, ffb, fh, ffh, fi, ffi, fj, ffj, fk, ffk, fl, ffl, ft, fft, ft, tf, ti, tt, ttf, tti.

Cambria supports the following "Common"-category ligatures:

fb, ffb, fh, ffh, fi, ffi, fk, ffk, fl, ffl.

## 4 Math mode

LATEX-WordFeel imports the amsmath package automatically. Also, LATEX math mode is able to use Cambria Math as the default math font.

Here are a few example equations typesetted with LATEX math mode:

$$A = \pi r^2 \tag{1}$$

$$(x + a)^n = \sum_{k=0}^{n} \binom{n}{k} x^k a^{n-k} \tag{2}$$

$$(1 + x)^n = 1 + \frac{nx}{1!} + \frac{n(n-1)x^2}{2!} + \dots \tag{3}$$

$$f(x) = a_0 + \sum_{n=1}^{\infty} \left( a_n \cos \frac{n\pi x}{L} + b_n \sin \frac{n\pi x}{L} \right) \tag{4}$$

$$a^2 + b^2 = c^2 \tag{5}$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \tag{6}$$

$$e^x = 1 + \frac{x}{1!} + \frac{x^2}{2!} + \frac{x^3}{3!} + \dots, \qquad -\infty < x < \infty \tag{7}$$

$$\sin \alpha \pm \sin \beta = 2 \sin \frac{1}{2}(\alpha \pm \beta) \cos \frac{1}{2}(\alpha \mp \beta) \tag{8}$$

$$\cos \alpha + \cos \beta = 2 \cos \frac{1}{2}(\alpha + \beta) \cos \frac{1}{2}(\alpha - \beta) \tag{9}$$

## 5    Dummy text demo

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis urna.

Nunc viverra imperdiet enim. Fusce est. Vivamus a tellus.

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Proin pharetra nonummy pede. Mauris et orci.

Aenean nec lorem. In porttitor. Donec laoreet nonummy augue.

Suspendisse dui purus, scelerisque at, vulputate vitae, pretium mattis, nunc. Mauris eget neque at sem venenatis eleifend. Ut nonummy.

Fusce aliquet pede non pede. Suspendisse dapibus lorem pellentesque magna. Integer nulla.

Donec blandit feugiat ligula. Donec hendrerit, felis et imperdiet euismod, purus ipsum pretium metus, in lacinia nulla nisl eget sapien. Donec ut est in lectus consequat consequat.

Etiam eget dui. Aliquam erat volutpat. Sed at lorem in nunc porta tristique.

Proin nec augue. Quisque aliquam tempor magna. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas.

Nunc ac magna. Maecenas odio dolor, vulputate vel, auctor ac, accumsan id, felis. Pellentesque cursus sagittis felis.

## 6    License

This template is released under MIT license. For more information, please refer to `https://github.com/m13253/LaTeX-WordFeel`.