# How to Create a Document Template with Microsoft Word

Many organizations rely on document templates to jump-start the writing of certain types of documents (like procedures and policies), and most of these organizations use Microsoft Word as their word processor. Here is some advice on the best way to go about crafting such template documents.

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# Introduction

The way a template is used is a big clue to how to craft one: Typically an author begins to write a certain type of document (let's say for ease of discussion, a procedure) by finding the official template and opening it. The next step is to save the template as the first version of the actual procedure. The result at this point is a Word file that is identical in contents to the template document but with a different filename. After this, the author edits the procedure document until it is completed.

A template provides:

- a) an organization (aka outline) with first- and second-level headings;
- b) sample introductory paragraphs;
- c) a sample title page;
- d) page numbering;
- e) a table of contents;
- f) typography, principally fonts for the various document components; and
- g) styles.

A Word template also may contain:

- h) file properties;
- i) unused styles;
- j) macros; and
- k) custom shortcut keys.

As the creator of the template, it is your job to remove all file properties, particularly Title, Subject, Author, Manager, and Comments. It is also your job to ensure that the embedded styles completely support the planned typography, and that there are no unused styles left in the template. If you are going to leave macros and/or custom shortcut keys in the template file, be sure to so advise the users.

#### **Vocabulary: Document Elements and Components**

It is important to begin with a common vocabulary. These words apply to documents; they are not specific to Microsoft Word.

*Content*, in the new world of the internet, is information that is expressed through a medium like speech, writing, or image. In a sort of shorthand, "content" generally refers to the text and/or images that comprise documents.

#### Document design includes

- a) Document structure and
- b) Typography.

*Document structure.* Traditionally, the structure of a document reflects its document type (which explains why a letter has a different structure than a procedure). Conceptually, a structure is the orderly (organizational) arrangement of content with the addition of labels and navigation. I use the word *label* generically, it includes headings and captions.

*Component* is a unit of content within a document. It could be a title page, table of contents, section, or appendix. Components have content and properties like typeface, color, and alignment (which are design *elements*). Some components are an assembly, or composite, of other components (smaller units of content): for example, a title page may be composed of a title, sub-title, author, and publication date.

*Typography* is the aggregate of the document components' formats; it is the appearance of typeset matter. It includes formats for pages, lines, type, paragraphs, tables, etc.

*Elements* are the visual properties of content. In aggregate, they manifest the document typography.

#### **Managing Styles**

Unfortunately, this is not a simple process.

It comprises several steps:

- 1) Identify all styles in the document file.
- 2) Identify styles in use.
- 3) Remove styles not in use.
- 4) Modify styles in use in order to minimize local overrides.
- 5) Create and apply styles in a semantical way.

The goal is adopt Best Practices:

- Apply the appropriate style to each and every document component.
- Use styles to control all possible formats.
- Minimize local formats that override template(s).
- As much as practicable, use styles to reflect the semantic content of the document text. For example, use heading styles for headings but not for list items.

While much of the following directions address the adaption of an existing template document, they can be used to good advantage when creating a template "from scratch."

# 1) Identify all styles in the document file

In order to ensure that only planned styles are included in the template, generate a report of all the styles in the document file. This is done with menu <u>File, Print</u>:

Print	? ×
Printer Name:hp LaserJet 1300 PCL 5	▼ Properties
Status: Idle Type: hp LaserJet 1300 PCL 5 Where: DOT4_001 Comment:	Find Printer
Page range  All  C Current page  C Selection  C Pages:  Enter page numbers and/or page ranges separated by commas. For example, 1,3,5–12	Copies Number of copies:
Print what: Styles	Zoom       Pages per sheet:     1 page       Scale to paper size:     No Scaling
Options	OK Cancel

In the "Print what" text box, select "Styles." Unfortunately, the print file goes directly to the printer; you may find it more useful to save it as a PDF file for ease of future reference.

#### 2) Identify styles in use

The next step is to find where these styles are used in the document. To do that you will browse the document and use a special secondary window to show you the style name of the document text. This can be tedious, but you only need to do it once. Attention to detail is critical.

Word 2003 has a Reveal Formatting pane which is particularly helpful at this point. I suggest adding a link to it on your <u>Format</u> menu. In the Options group, select "Distinguish style source" to turn it on; this will cause the style name to appear in the Reveal Formatting pane.

As you move the cursor through the template document, the actual formatting of each character is shown along with the style name in the Reveal Formatting pane. You will want to record this information for later reference, I like to write the style names on a printed version of the actual template document. For example, by a second-level heading I would write the name of the style that the heading has.

After identifying all the styles actually in use, compare that list to that of all the styles in the document file. There are likely many styles that are not in use. Flag the styles on the report that are not in use. The next step is to remove as many of those as possible.

#### 3) Remove styles not in use

The best tool for removing styles from a document file is Organizer. I recommend adding a link to the "Organizer" window to your <u>Tools</u> menu.

Organizer		×
Styles         AutoText         Toolbars         Macro I           In Microsoft Word Template Documents.do         1 (1.1 (1.1.1 (1.1.1 (1.1.1 a))))         1 (1.2.1 a))         1 (1.2.1 a))           Block Text         Block Text         Block Text         Body Text 2 a)         1 (1.2.1 a))	In Normal.dot:           Copy         1 / 1.1 / 1.1.1           1 / 1.1 / 1.1.1         1 / a /i           Block Text         Block Text           Body Text 2         Body Text 2	<u> </u>
Body Text 3  Styles available in: Microsoft Word Template Documents.d	Body Text 3 Styles availa <u>b</u> le in: Normal.dot (globa	
Close Ele		os <u>e</u> File
		Close

When you open "Organizer", styles in two documents are shown. In the left list box are the styles in the current document, in the right list box are the styles in the global template file. The name of the file is presented at the top of each list box.

At this point, the document template file that you are editing is open and its styles are listed in the left box. This list should match the one you printed/saved as a report. Using the printed report of included styles as a guide, scroll through the left list box until a style name appears that is not in use. Select that style name and select the [Delete] button. An "are you sure" window opens:

Microsoft Office Word	×
Do you wish to delete the style 1 / 1.1 / 1.1.1?	
Yes to <u>A</u> ll <u>No</u> Cancel	

Respond [Yes]. The window closes automatically and the style disappears from the left list box.

Word will not let you delete certain basic styles, even if they are not in use. It is okay to leave them.

After deleting as many unused styles as Word will let you, save the template document.

#### 4) Modify styles in use in order to minimize local overrides

The last step is to modify the styles in use in order to minimize local overrides. That is, to let the styles themselves control as much as possible the formatting of the document's text. This involves identifying which formatting is being done without a style, deciding how best to control the formatting with styles, changing the applicable styles, and removing local formats.

Reveal Formatting can show you where local formatting is overriding the style's formatting. . . .

#### 5) Create and apply styles in a semantical way

The key to creating documents with consistent formatting and easily-populated table of contents is: the semantical application of styles.

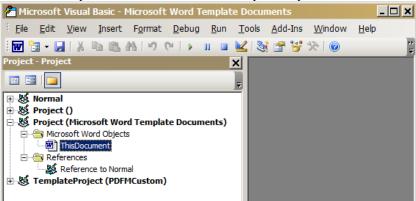
What I mean by "semantical application of styles" is the use of styles to reflect the nature of the content separate from its presentation. Presentation includes primarily typography (such as typeface, line height, and spacing). Nature of the content refers to the different components of a document, e.g., title, paragraph, heading, running head, and footnote—which reflect the basic document structure.

This is discussed in more detail below in section Using Word Styles Correctly.

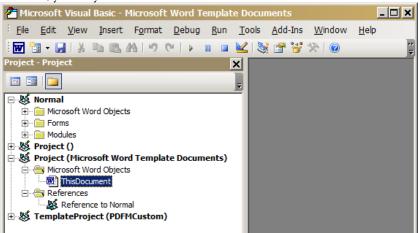
#### **Managing Macros**

The place to start is identifying all macros contained in the template file. The best and easiest way to do this is with the Microsoft Visual Basic Editor.

- 1. Open the Visual Basic Editor in its own window with [Alt + F11] or menu <u>Tools, Macro, Visual</u> <u>Basic Editor</u>.
- 2. If the Project pane is not open, open it with menu View, Project Explorer or [Ctrl + R].
- 3. In the Project pane you will see an entry for Normal (the global template), an entry for the open document template file, and entries for other open templates and documents.



4. Each entry uses an expand-collapse tool to reveal the relevant contents. If you expand an entry's contents, you may see:



In the above sample, I expanded the entry for the global template, Normal.dot, to reveal three kinds of objects—Word Objects, Forms, and Modules. Macros are contained within Modules. If a Word file does not contain a Modules object, then it does not contain macros. If a Word file does contain a Modules object, you can expand it to see a list of all the modules, each of which contain one or more macros. You should remove all macros from your document template that are not necessary to its proper action. Which is to say that there are some circumstances under which a particular macro belongs in a document template.

You can remove macros from your document template with the Microsoft Visual Basic Editor.

- 1. Expand the list of modules.
- 2. Select a module.
- 3. Use the menu <u>File, Remove <module name></u> to delete it. You have to remove each module separately.

After removing macros, verify that there are none remaining, then save your document template file and close the Visual Basic Editor.

#### Managing Custom Shortcut Keys

My document *Word Techniques* has a section on custom shortcut keys that includes where they are stored, how to create them, and how to manage them. Unfortunately, it is a trying subject. Although shortcut keys are soooo useful.

#### Document Design

Document design encompasses a format specification of the various components of the document. Note that "format" as used here refers to Microsoft Word's vocabulary.

Formats:

- Page
- Paragraph
- Line
- Character (e.g., type or letter)

There are several things that must be known about a document before it can be designed:

- a) Size/length. How many pages?
- b) Document type. For example: letter, report, procedure, policy, college thesis.
- c) Audience. For example: employee, customer, business partner (e.g., government agency), vendor, friend. The audience can influence the extent of branding.
- d) Formality, degree of.
- e) Will the document be rendered as *recto verso*?
- f) In which country does the audience reside? Different countries have different standard sizes of paper.

One might make the argument that display or distribution method plays a significant role in the chosen design. For example, a paper-based document that is distributed in its paper form might be designed differently than a document subject to computer-based distribution.

Some of these properties have specific document designs, while others do not. For example, a business letter has a specific format as does a college thesis. Documents submitted to government agencies may be required to comply with the agency's document design.

Some components of a document:

Paragraph

- Heading
- Running header and footer
- Footnote
- Table of contents
- Title and subtitle
- List item
- Column

These components can be combined to address things like a title page, index, revision history.

When is a document design done? Certainly the questions itemized above can be addressed at the beginning. But the actual organization and formats may be done piecemeal and/or iteratively during the drafting of the template.

#### Semantic Markup

"Semantic markup" is a concept that originated with the earliest designers of the World Wide Web. It refers to applying formatting styles that are specific to the semantic meaning of the subject text. For example, book titles are commonly set in italics. While you could override the paragraph style with italics for the title text, you could alternatively apply a character style named BookTitle that consists solely of italics. The latter approach is semantic markup.

# **Using Word Styles Correctly**

The following discussion is intended you help you use Microsoft Word as efficiently as possible to produce text documents that either themselves comply with corporate standards or can be easily modified to comply with corporate standards.

The key to creating documents with consistent formatting and easily-populated table of contents is The semantical application of styles.

What I mean by "semantical application of styles" is the use of styles to reflect the nature of the content separate from its presentation. Presentation includes primarily typography (such as typeface, line height, and spacing). Nature of the content refers to the different components of a document, e.g., title, paragraph, heading, running head, and footnote—which reflect the basic document structure.

#### About Styles in Word

The key aspects of Word are document *components* and *styles*. Components include paragraphs, headings, lists, tables, header (aka running head), and footer (aka running foot). All text in a Word document has an associated style (whether you notice it or not). There are many built-in styles (i.e., Word contains many defined styles out-of-the-box). Users can change those built-in styles as well as add custom styles. Styles have a name, a type, and one or more formats. The most commonly used style types are paragraph and character; there are other types that are best avoided (list and table).

Paragraph type styles apply to entire paragraphs. Character type styles apply to selected characters (text); they should not be used for entire paragraphs.

Examples of built-in styles:

- "Normal" is of type paragraph. It has font and paragraph formats. It is commonly the default style applied to text as you type, but Word can be configured to use a different style."
- "Heading 1" is of type paragraph. It has font and paragraph formats.
- "List Bullet" is of type paragraph. It has font, paragraph, and bullets and numbering formats.
- "CaptionAutoNum" is of type paragraph. It has font, paragraph, bullets and numbering, and numbering style formats.
- Strong" is of type character. It has only font (aka typeface) formats.

#### Applying Styles

Best Practices:

- Apply the appropriate style to all document components.
- Use styles to control all possible formats.
- Minimize local formats that override templates.
- As much as practicable, use styles to reflect the semantic content of the document text. For example, use heading styles for headings but not for list items.

It is not within the scope of this document to advise you how to operate Word. Be advised that working with styles can tax your knowledge of Word.

Component	Comment	Recommended Word Style Name
paragraph		Normal
document title		Title
first level heading		Heading 1
second level heading		Heading 2
third level heading		Heading 3
fourth level heading		Heading 4
run in heading	character type, custom style	RunInHeading
bulleted list item		List Bullet
secondary bulleted list item		List Bullet 2
Arabic-numbered list item		List Number
lower-case alphabetic "numbered" list item		List Number 2
lower-case roman numeral numbered list item		List Number 3
definition list term	character type, custom style	RunInHeading
definition list definition	start with the entire list item styled as "Normal" then change the term's style	Normal
heading for table of contents	this heading will not be automatically included in the TOC	TOCHeading

<sup>1.</sup> The default paragraph style can be changed as an Advanced Option. In Word 2003 it appears on the Edit tab of the Options dialog box.

Component	Comment	Recommended Word Style Name
paragraphs that follow a list item		Normal
header (portrait)		Header
footer (portrait)		Footer
header (landscape), if tabs are used for layout	custom style based on Header, tabs may be different	HeaderLandscape
footer (landscape), if tabs are used for layout	custom style based on Footer, tabs may be different	FooterLandscape
text in table cells	you may reduce the font size	Normal
name of technical object (like file name)	custom style, used to distinguish the text	TechnicalName

Some styles are applied automatically by Word. You may want to change the style formats, but do not apply a differently-named style. These styles include:

Footnote Reference Footnote Text TOC1 TOC2 TOC3 etc.

The blank lines between paragraphs are often achieved with an empty paragraph. Sometimes Normal is defined with a blank space below the paragraph. This blank space will interfere with the upper and lower margins of other components like headings.

#### Inheritance and Local Formats

The following explanation culminates in the definition of *local formats*.

The styles in a new document are initialized (inherited) in different ways depending on how the document is created, the most common are:

Document Creation Method	Style Initialization Method
create a blank document	from the global template (Normal.dotm or Normal.dot)
create a document from a prescribed document template file (with a filename ending in DOTM or DOT)	from the document template file
create a document from an existing document file (with a filename ending in DOCX or DOC).	from the source document file

Once the styles have been initialized in your text document, you can change them in two ways:

- You can copy a style definition from a different document (using the Organizer tool).
- You can redefine the style within your text document with the Modify Style tool (select the named style in either the Quick Style Gallery or the Styles window, then select <u>Modify</u> from the context window).

In addition, you can change the format of text without regard for the style definition:
You can apply different formats to selected text using Word's format tools; in this case, the style changes are considered to be *local*.