

# Sample PDF Document

Robert Maron  
Grzegorz Grudziński

February 20, 1999



# Contents

|          |   |          |
|----------|---|----------|
| <b>1</b> | <b>Template</b>   | <b>5</b> |
| 1.1      | How to compile a <code>.tex</code> file to a <code>.pdf</code> file . . . . . | 5        |
| 1.1.1    | Tools . . . . .   | 5        |
| 1.1.2    | How to use the tools . . . . .  | 5        |
| 1.2      | How to write a document . . . . .   | 6        |
| 1.2.1    | The main document . . . . .   | 6        |
| 1.2.2    | Chapters . . . . .  | 6        |
| 1.2.3    | Spell-checking . . . . .  | 6        |
| 1.3      | $\LaTeX$ and pdf $\LaTeX$ capabilities . . . . .                              | 7        |
| 1.3.1    | Overview . . . . .  | 7        |
| 1.3.2    | $\LaTeX$ . . . . .  | 7        |
| 1.3.3    | pdf $\LaTeX$ . . . . .  | 7        |
| 1.3.4    | Examples . . . . .  | 7        |



# Chapter 1

## Template

### 1.1 How to compile a `.tex` file to a `.pdf` file

#### 1.1.1 Tools

To process the files you (may) need:

`pdflatex` (for example from `tetex` package 0.9-6, which you can get from [Red Hat 5.2](#));

`acroread` (a PDF viewer, available from <http://www.adobe.com/>);

`ghostscript` 5.10 (for example from [Red Hat Contrib](#)) and `ghostview` or `gv` (from RedHat Linux);

`efax` package could be useful, if you plan to fax documents.

#### 1.1.2 How to use the tools

Follow these steps:

1. put all source `.tex` files in one directory, then `chdir` to the directory (or put some of them in the `LTEX` search path — if you know how to do this);
2. run “`pdflatex file.tex`” on the main file of the document three times (three — to prepare valid table of contents);
3. to see or print the result use `acroread` (unfortunately some versions of `acroread` may produce PostScript which is too complex), or

4. run `ghostscript`: “`gv file.pdf`” to display or:  
“`gs -dNOPAUSE -sDEVICE=pswrite -q -dBATCH -sOutputFile=file.ps file.pdf`”  
to produce a PostScript file;
5. run “`fax send phone-number file.ps`” as root to send a fax, or — if you know how to do this — modify the fax script to be able to fax `.pdf` files directly (you have to insert “`%PDF*`” somewhere...).

## 1.2 How to write a document

### 1.2.1 The main document

Choose the name of the document, say `document`. Copy `template.tex` to `document.tex`, then edit it, change the title, the authors and set proper `include(s)` for all the chapters.

### 1.2.2 Chapters

Each chapter should be included in the main document as a separate file. You can choose any name for the file, but we suggest adding a suffix to the name of the main file. For our example we use the file name `document_chapter1.tex`.

First, copy `template_chapter.tex` to `document_chapter1.tex` and add the line

```
\include{document_chapter1}
```

in the `document.tex`, then edit `document_chapter1.tex`, change the chapter title and edit the body of the chapter appropriately.

### 1.2.3 Spell-checking

*Do* use a spell-checker, please!

You may also want to check grammar, style and so on. Actually you should do it (if you have enough spare time). But you *must* check spelling!

You can use the `ispell` package for this, from within `emacs`, or from the command line:

```
ispell -t document_chapter1.tex
```

## 1.3 $\text{\LaTeX}$ and $\text{pdf}\text{\LaTeX}$ capabilities

### 1.3.1 Overview

First you edit your source `.tex` file. In  $\text{\LaTeX}$  you compile it using the `latex` command to a `.dvi` file (which stands for device-independent). The `.dvi` file can be converted to any device-dependent format you like using an appropriate driver, for example `dvips`.

When producing `.pdf` files you should use `pdflatex`, which produces directly `.pdf` files out of `.tex` sources. Note that in the `.tex` file you may need to use some PDF specific packages.

For viewing `.tex` files use your favourite text editor, for viewing `.dvi` files under X Window System use `xdvi` command, `.ps` files can be viewed with `gv` (or `ghostview`) and `.pdf` files with `acroread`, `gv` or `xpdf`.

### 1.3.2 $\text{\LaTeX}$

A lot of examples can be found in this document.

You should also print

```
doc/latex/general/latex2e.dvi and
```

```
doc/latex/general/lshort2e.dvi
```

from your `tetex` distribution (usually in

```
/usr/share/texmf or
```

```
/usr/lib/texmf/texmf).
```

### 1.3.3 $\text{pdf}\text{\LaTeX}$

Consult `doc/pdftex/manual.pdf` from your `tetex` distribution for more details. Very useful informations can be found in the `hyperref` and `graphics` package manuals:

```
doc/latex/hyperref/manual.pdf and
```

```
doc/latex/graphics/grfguide.dvi.
```

### 1.3.4 Examples

#### References

MIMUW

**Hyperlinks**

This is a target.

And [this is a link](#).

**Dashes, etc.**

There are three kinds of horizontal dash:

- (use inside words; for example “home-page”, “X-rated”)
- (use this one between numbers; for example “pages 2–22”)
- (use this one as a sentence separator — like here)

**National characters**

ó, é, í, ...

è, à, ì, ...

ô, ê, ...

õ, ã, ...

ö, ë, ...

ž

ą, ħ

ł, ø, ß

There are other ways to do this, see the documentation for `inputenc` package.

**Reserved characters**

Some characters have some special meaning, thus cannot be entered in the usual way.

\$ & % # \_ { }

$n$

~ ^



**Math** $1^2, 1^{2n}, \dots$  $i_1, i_{2n}, \dots$  $\frac{1}{2}, \frac{2n}{2-3}, \dots$  $\alpha, \beta, \gamma, \Omega, \dots$  $! , ) , , \notin, 2, \star, \dots$  $\rho_{\overline{2}}, \dots$  $\overline{2+2}, \dots$ 

For more examples and symbols see chapter 3 of `lshort2e.dvi`.

**Fonts**

Roman

*Emphasis*

Medium weight — the default

**Boldface**

Upright

*Slanted*

Sans serif

SMALL CAPS

Typewriter

and sizes:

— tiny

— scriptsize

— footnotesize

— small

— normalsize

- large
- Large
- LARGE
- huge
- Huge