## Lorem ipsum

# Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc ac faucibus odio.

Vestibulum neque massa, scelerisque sit amet ligula eu, congue molestie mi. Praesent ut varius sem. Nullam at porttitor arcu, nec lacinia nisi. Ut ac dolor vitae odio interdum condimentum. Vivamus dapibus sodales ex, vitae malesuada ipsum cursus convallis. Maecenas sed egestas nulla, ac condimentum orci. Mauris diam felis, vulputate ac suscipit et, iaculis non est. Curabitur semper arcu ac ligula semper, nec luctus nisl blandit. Integer lacinia ante ac libero lobortis imperdiet. *Nullam mollis convallis ipsum, ac accumsan nunc vehicula vitae*. Nulla eget justo in felis tristique fringilla. Morbi sit amet tortor quis risus auctor condimentum. Morbi in ullamcorper elit. Nulla iaculis tellus sit amet mauris tempus fringilla.

Maecenas mauris lectus, lobortis et purus mattis, blandit dictum tellus.

- Maecenas non lorem quis tellus placerat varius.
- Nulla facilisi.
- Aenean conque fringilla justo ut aliquam.
- <u>Mauris id ex erat.</u> Nunc vulputate neque vitae justo facilisis, non condimentum ante sagittis.
- Morbi viverra semper lorem nec molestie.
- Maecenas tincidunt est efficitur ligula euismod, sit amet ornare est vulputate.



In non mauris justo. Duis vehicula mi vel mi pretium, a viverra erat efficitur. Cras aliquam est ac eros varius, id iaculis dui auctor. Duis pretium neque ligula, et pulvinar mi placerat et. Nulla nec nunc sit amet nunc posuere vestibulum. Ut id neque eget tortor mattis tristique. Donec ante est, blandit sit amet tristique vel, lacinia pulvinar arcu. Pellentesque scelerisque fermentum erat, id posuere justo pulvinar ut. Cras id eros sed enim aliquam lobortis. Sed lobortis nisl ut eros efficitur tincidunt. Cras justo mi, porttitor quis mattis vel, ultricies ut purus. Ut facilisis et lacus eu cursus.

In eleifend velit vitae libero sollicitudin euismod. Fusce vitae vestibulum velit. Pellentesque vulputate lectus quis pellentesque commodo. Aliquam erat volutpat. Vestibulum in egestas velit. Pellentesque fermentum nisl vitae fringilla venenatis. Etiam id mauris vitae orci maximus ultricies.

# Cras fringilla ipsum magna, in fringilla dui commodo a.

	Lorem ipsum	Lorem ipsum	Lorem ipsum
1	In eleifend velit vitae libero sollicitudin euismod.	Lorem	
2	Cras fringilla ipsum magna, in fringilla dui commodo a.	Ipsum	
3	Aliquam erat volutpat.	Lorem	
4	Fusce vitae vestibulum velit.	Lorem	
5	Etiam vehicula luctus fermentum.	Ipsum	

# Lorem ipsum dolor sit amet, consectetur adipiscing elit.

Nunc ac faucibus odio. Vestibulum neque massa, scelerisque sit amet ligula eu, congue molestie mi. Praesent ut varius sem. Nullam at porttitor arcu, nec lacinia nisi. Ut ac dolor vitae odio interdum condimentum. Vivamus dapibus sodales ex, vitae malesuada ipsum cursus convallis. Maecenas sed egestas nulla, ac condimentum orci. Mauris diam felis, vulputate ac suscipit et, iaculis non est. Curabitur semper arcu ac ligula semper, nec luctus nisl blandit. Integer lacinia ante ac libero lobortis imperdiet. Nullam mollis convallis ipsum, ac accumsan nunc vehicula vitae. Nulla eget justo in felis tristique fringilla. Morbi sit amet tortor quis risus auctor condimentum. Morbi in ullamcorper elit. Nulla iaculis tellus sit amet mauris tempus fringilla.

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2	Cras fringilla ipsum magna, in fringilla dui commodo a.	Ipsum	
3	Aliquam erat volutpat.	Lorem	
4	Fusce vitae vestibulum velit.	Lorem	
5	Etiam vehicula luctus fermentum.	Ipsum	

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**Lorem Ipsum** is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum.

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## A Simple PDF File

This is a small demonstration .pdf file -

just for use in the Virtual Mechanics tutorials. More text. And more text. And more text. And more text.

And more text. And more text. And more text. And more text. And more text. And more text. And more text. And more text. And more text. And more text. And more text. And more text. And more text. And more text. And more text.

And more text. And more text. And more text. And more text. And more text. And more text. Even more. Continued on page 2 ...

## Simple PDF File 2

...continued from page 1. Yet more text. And more text. Oh, how boring typing this stuff. But not as boring as watching paint dry. And more text. And more text. And more text. And more text. Boring. More, a little more text. The end, and just as well.

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## Sample PDF Document

Robert Maron Grzegorz Grudziński

February 20, 1999

## **Contents**

1	Tem	plate
	1.1	How to compile a .tex file to a .pdf file
		1.1.1 Tools
		1.1.2 How to use the tools
	1.2	How to write a document
		1.2.1 The main document
		1.2.2 Chapters
		1.2.3 Spell-checking
	1.3	LATEX and pdfLATEX capabilities
		1.3.1 Overview
		1.3.2 LATEX
		1.3.3 pdfI/T <sub>E</sub> X
		134 Fyamples

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## 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 <a href="http://www.adobe.com/">http://www.adobe.com/</a>);
- 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 LATEX 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 LATEX and pdfLATEX capabilities

#### 1.3.1 Overview

First you edit your source .tex file. In 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 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 pdfLATEX

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, ...
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- ô, ê, ...
- $\tilde{0}$ ,  $\tilde{n}$ , ...
- ö, ë, ...
- ż
- ą, ę
- 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.

- \$ & % # \_ { }
- \
- ~ ^

### 1.3. LATEX AND PDFLATEX CAPABILITIES

9

Math

- $1^2, 1^{2n}, \dots$
- $i_1, i_{2n}, \dots$
- $\bullet \ \frac{1}{2}, \frac{2n}{2-3}, \dots$
- $\alpha, \beta, \gamma, \Omega, \dots$
- $\bullet \rightarrow, \Rightarrow, \geq, \neq, \in, \star, \dots$
- $\sqrt{2}, \dots$
- $\overline{2+2}$ , ...

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
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  - small
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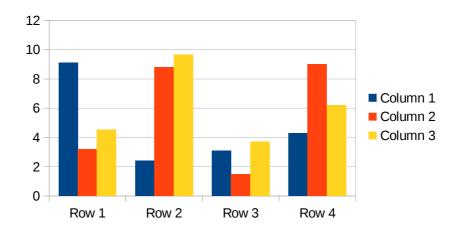
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## A Simple PDF File

This is a small demonstration .pdf file -

just for use in the Virtual Mechanics tutorials. More text. And more text. And more text. And more text.

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## Sample PDF Document

Robert Maron Grzegorz Grudziński

February 20, 1999

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### 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 <a href="http://www.adobe.com/">http://www.adobe.com/</a>);
- 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 LATEX 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 LATEX and pdfLATEX capabilities

#### 1.3.1 Overview

First you edit your source .tex file. In 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 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 pdfLATEX

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, ...
- $\tilde{0}$ ,  $\tilde{n}$ , ...
- ö, ë, ...
- ż
- ą, ę
- 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.

- \$ & % # \_ { }
- \
- ~ ^

#### 1.3. LATEX AND PDFLATEX CAPABILITIES

9

Math

- $1^2, 1^{2n}, \dots$
- $i_1, i_{2n}, \dots$
- $\bullet \ \frac{1}{2}, \frac{2n}{2-3}, \dots$
- $\alpha, \beta, \gamma, \Omega, \dots$
- $\bullet \rightarrow, \Rightarrow, \geq, \neq, \in, \star, \dots$
- $\sqrt{2}, \dots$
- $\overline{2+2}$ , ...

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
- hugeHuge

## Sample PDF Document

Robert Maron Grzegorz Grudziński

February 20, 1999

- large
- Large
- LARGE
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### 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 <a href="http://www.adobe.com/">http://www.adobe.com/</a>);
- 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 LATEX 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...).

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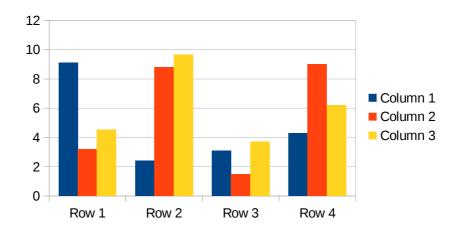
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In non mauris justo. Duis vehicula mi vel mi pretium, a viverra erat efficitur. Cras aliquam est ac eros varius, id iaculis dui auctor. Duis pretium neque ligula, et pulvinar mi placerat et. Nulla nec nunc sit amet nunc posuere vestibulum. Ut id neque eget tortor mattis tristique. Donec ante est, blandit sit amet tristique vel, lacinia pulvinar arcu. Pellentesque scelerisque fermentum erat, id posuere justo pulvinar ut. Cras id eros sed enim aliquam lobortis. Sed lobortis nisl ut eros efficitur tincidunt. Cras justo mi, porttitor quis mattis vel, ultricies ut purus. Ut facilisis et lacus eu cursus.

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In non mauris justo. Duis vehicula mi vel mi pretium, a viverra erat efficitur. Cras aliquam est ac eros varius, id iaculis dui auctor. Duis pretium neque ligula, et pulvinar mi placerat et. Nulla nec nunc sit amet nunc posuere vestibulum. Ut id neque eget tortor mattis tristique. Donec ante est, blandit sit amet tristique vel, lacinia pulvinar arcu. Pellentesque scelerisque fermentum erat, id posuere justo pulvinar ut. Cras id eros sed enim aliquam lobortis. Sed lobortis nisl ut eros efficitur tincidunt. Cras justo mi, porttitor quis mattis vel, ultricies ut purus. Ut facilisis et lacus eu cursus.

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In non mauris justo. Duis vehicula mi vel mi pretium, a viverra erat efficitur. Cras aliquam est ac eros varius, id iaculis dui auctor. Duis pretium neque ligula, et pulvinar mi placerat et. Nulla nec nunc sit amet nunc posuere vestibulum. Ut id neque eget tortor mattis tristique. Donec ante est, blandit sit amet tristique vel, lacinia pulvinar arcu. Pellentesque scelerisque fermentum erat, id posuere justo pulvinar ut. Cras id eros sed enim aliquam lobortis. Sed lobortis nisl ut eros efficitur tincidunt. Cras justo mi, porttitor quis mattis vel, ultricies ut purus. Ut facilisis et lacus eu cursus.

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	Lorem ipsum	Lorem ipsum	Lorem ipsum
1	In eleifend velit vitae libero sollicitudin euismod.	Lorem	
2	Cras fringilla ipsum magna, in fringilla dui commodo a.	Ipsum	
3	Aliquam erat volutpat.	Lorem	
4	Fusce vitae vestibulum velit.	Lorem	
5	Etiam vehicula luctus fermentum.	Ipsum	