

# **A Layperson's Guide to the Church of Data**

**Real and False Prophets of the Information Age**

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August 4, 2022

The harmony of the world is made manifest in Form and Number, and the heart and soul and all the poetry of Natural Philosophy are embodied in the concept of mathematical beauty.

– D'Arcy Wentworth Thompson

# Preface

I am of the opinion that every  $\text{\LaTeX}$  geek, at least once during his life, feels the need to create his or her own class: this is what happened to me and here is the result, which, however, should be seen as a work still in progress. Actually, this class is not completely original, but it is a blend of all the best ideas that I have found in a number of guides, tutorials, blogs and [tex.stackexchange.com](http://tex.stackexchange.com) posts. In particular, the main ideas come from two sources:

- ▶ [Ken Arroyo Ohori's Doctoral Thesis](#), which served, with the author's permission, as a backbone for the implementation of this class;
- ▶ The [Tufte-Latex Class](#), which was a model for the style.

The first chapter of this book is introductory and covers the most essential features of the class. Next, there is a bunch of chapters devoted to all the commands and environments that you may use in writing a book; in particular, it will be explained how to add notes, figures and tables, and references. The second part deals with the page layout and design, as well as additional features like coloured boxes and theorem environments.

I started writing this class as an experiment, and as such it should be regarded. Since it has always been intended for my personal use, it may not be perfect but I find it quite satisfactory for the use I want to make of it. I share this work in the hope that someone might find here the inspiration for writing his or her own class.

*Federico Marotta*

# Contents

|   |            |
|---|------------|
| <b>Preface</b>                                  | <b>iii</b> |
| <b>Contents</b>                                 | <b>iv</b>  |
| <b>1 Introduction</b>                           | <b>1</b>   |
| 1.1 The Main Ideas . . . . .                    | 1          |
| 1.2 What This Class Does . . . . .              | 1          |
| <b>HISTORY</b>                                  | <b>2</b>   |
| <b>DATA</b>                                     | <b>3</b>   |
| <b>CLASSIFIERS</b>                              | <b>4</b>   |
| <b>TRANSFORMERS</b>                             | <b>5</b>   |
| <b>APPENDIX</b>                                 | <b>6</b>   |
| <b>A Heading on Level 0 (chapter)</b>           | <b>7</b>   |
| A.1 Heading on Level 1 (section) . . . . .      | 7          |
| A.1.1 Heading on Level 2 (subsection) . . . . . | 7          |
| A.2 Lists . . . . .                             | 8          |
| A.2.1 Example for list (itemize) . . . . .      | 8          |
| A.2.2 Example for list (enumerate) . . . . .    | 8          |
| A.2.3 Example for list (description) . . . . .  | 9          |
| <b>B Fonts Testing</b>                          | <b>10</b>  |
| B.1 Font Sizes . . . . .                        | 10         |
| B.2 Font Families . . . . .                     | 10         |
| <b>C Test</b>                                   | <b>12</b>  |
| <b>Notation</b>                                 | <b>13</b>  |
| <b>Alphabetical Index</b>                       | <b>14</b>  |

# List of Figures

|                             |   |
|-----------------------------|---|
| 1.1 The Mona Lisa . . . . . | 1 |
|-----------------------------|---|

# List of Tables

# List of Listings

## 1.1 The Main Ideas

This is some text and a link to [bradflaughter.com](http://bradflaughter.com).<sup>1</sup>

## 1.2 What This Class Does

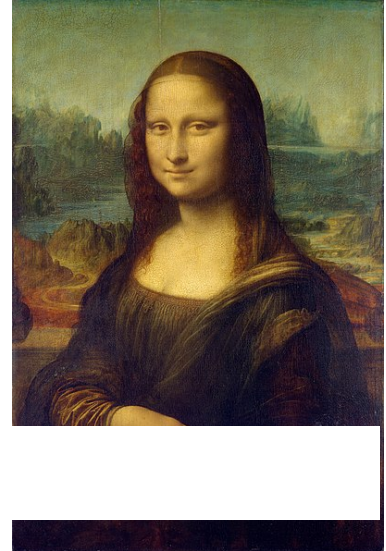
(see also Section ?? on page ??)

**List Item 1** It's a list, yo!

**List Item 2** Second item in the list.

```
cd myproject
docker run tensorflow
#profit!
```

[tex.stackexchange.org](http://tex.stackexchange.org) for help.



**Figure 1.1:** The Mona Lisa.  
[https://commons.wikimedia.org/wiki/File:Mona\\_Lisa,\\_by\\_Leonardo\\_da\\_Vinci,\\_from\\_C2RMF\\_retouched.jpg](https://commons.wikimedia.org/wiki/File:Mona_Lisa,_by_Leonardo_da_Vinci,_from_C2RMF_retouched.jpg)

# HISTORY

**DATA**



# CLASSIFIERS

# TRANSFORMERS

# APPENDIX



---

## Heading on Level 0 (chapter)

---

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

### A.1 Heading on Level 1 (section)

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

#### A.1.1 Heading on Level 2 (subsection)

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

#### Heading on Level 3 (subsubsection)

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will

get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

**Heading on Level 4 (paragraph)** Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

## A.2 Lists

### A.2.1 Example for list (itemize)

- ▶ First item in a list
- ▶ Second item in a list
- ▶ Third item in a list
- ▶ Fourth item in a list
- ▶ Fifth item in a list

#### Example for list (4\*itemize)

- ▶ First item in a list
  - First item in a list
    - \* First item in a list
      - First item in a list
      - Second item in a list
    - \* Second item in a list
  - Second item in a list
- ▶ Second item in a list

### A.2.2 Example for list (enumerate)

1. First item in a list
2. Second item in a list
3. Third item in a list
4. Fourth item in a list
5. Fifth item in a list

**Example for list (4\*enumerate)**

1. First item in a list
  - a) First item in a list
    - i. First item in a list
      - A. First item in a list
      - B. Second item in a list
    - ii. Second item in a list
  - b) Second item in a list
2. Second item in a list

**A.2.3 Example for list (description)**

**First** item in a list  
**Second** item in a list  
**Third** item in a list  
**Fourth** item in a list  
**Fifth** item in a list

**Example for list (4\*description)**

**First** item in a list  
     **First** item in a list  
         **First** item in a list  
         **Second** item in a list  
     **Second** item in a list  
     **Second** item in a list  
**Second** item in a list

# B

## Fonts Testing

### B.1 Font Sizes

B.1 Font Sizes . . . . . 10

B.2 Font Families . . . . . 10

The quick brown fox jumps over the lazy dog.

The quick brown fox jumps over the lazy dog.

The quick brown fox jumps over the lazy dog.

The quick brown fox jumps over the lazy dog.

The quick brown fox jumps over the lazy dog.

The quick brown fox jumps over the lazy dog.

The quick brown fox jumps over the lazy dog.

The quick brown fox jumps over the lazy dog.

The quick brown fox jumps over the lazy dog.

The quick brown fox jumps over the lazy dog.

### B.2 Font Families

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

The quick brown fox jumps over the lazy dog. Medium.

The quick brown fox jumps over the lazy dog. Bold.

The quick brown fox jumps over the lazy dog. Upright.

*The quick brown fox jumps over the lazy dog. Italics.*

*The quick brown fox jumps over the lazy dog. Slanted.*

THE QUICK BROWN FOX JUMPS OVER THE LAZY DOG. SMALL CAPS.

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift - not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

The quick brown fox jumps over the lazy dog. Medium.

**The quick brown fox jumps over the lazy dog. Bold.**

The quick brown fox jumps over the lazy dog. Upright.

*The quick brown fox jumps over the lazy dog. Italics.*

*The quick brown fox jumps over the lazy dog. Slanted.*

The quick brown fox jumps over the lazy dog. Small Caps.

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift - not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

The quick brown fox jumps over the lazy dog. Medium.

**The quick brown fox jumps over the lazy dog. Bold.**

The quick brown fox jumps over the lazy dog. Upright.

*The quick brown fox jumps over the lazy dog. Italics.*

*The quick brown fox jumps over the lazy dog. Slanted.*

THE QUICK BROWN FOX JUMPS OVER THE LAZY DOG. SMALL CAPS.



Test

C

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

# Notation

The next list describes several symbols that will be later used within the body of the document.

- $c$       Speed of light in a vacuum inertial frame
- $h$       Planck constant

## Greek Letters with Pronunciations

| Character          | Name                      | Character            | Name                             |
|--------------------|---------------------------|----------------------|----------------------------------|
| $\alpha$           | alpha <i>AL-fuh</i>       | $\nu$                | nu <i>NEW</i>                    |
| $\beta$            | beta <i>BAY-tuh</i>       | $\xi, \Xi$           | xi <i>KSIGH</i>                  |
| $\gamma, \Gamma$   | gamma <i>GAM-muh</i>      | $\omicron$           | omicron <i>OM-uh-CRON</i>        |
| $\delta, \Delta$   | delta <i>DEL-tuh</i>      | $\pi, \Pi$           | pi <i>PIE</i>                    |
| $\epsilon$         | epsilon <i>EP-suh-lon</i> | $\rho$               | rho <i>ROW</i>                   |
| $\zeta$            | zeta <i>ZAY-tuh</i>       | $\sigma, \Sigma$     | sigma <i>SIG-muh</i>             |
| $\eta$             | eta <i>AY-tuh</i>         | $\tau$               | tau <i>TOW (as in cow)</i>       |
| $\theta, \Theta$   | theta <i>THAY-tuh</i>     | $\upsilon, \Upsilon$ | upsilon <i>OOP-suh-LON</i>       |
| $\iota$            | iota <i>eye-OH-tuh</i>    | $\phi, \Phi$         | phi <i>FEE, or FI (as in hi)</i> |
| $\kappa$           | kappa <i>KAP-uh</i>       | $\chi$               | chi <i>KI (as in hi)</i>         |
| $\lambda, \Lambda$ | lambda <i>LAM-duh</i>     | $\psi, \Psi$         | psi <i>SIGH, or PSIGH</i>        |
| $\mu$              | mu <i>MEW</i>             | $\omega, \Omega$     | omega <i>oh-MAY-guh</i>          |

Capitals shown are the ones that differ from Roman capitals.

# Alphabetical Index

preface, iii