

# ajtjdjafflwjftaljkjrlkjaellejlej- jaelrjerjlaeljrealjaerklaer- jaelrkjarelkjalre

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Martin E. Liza

September 15, 2019





# Outline for Section 1

- 1. Light Frames
  - 1.1 Blind Text
  - 1.2 Structuring Elements
  - 1.3 Numerals and Mathematics
  - 1.4 Figures and Code Listings
  - 1.5 Citations and Bibliography



## Lists and locales

*Lorem ipsum dolor sit amet*

- Nulla nec lacinia odio.  
Curabitur urna tellus.
  - Fusce id sodales dolor. Sed  
id metus dui.
    - » Cupio virtus licet mi vel  
feugiat.
- 1. Donec porta, risus porttitor  
egestas scelerisque video.
  - 1.1 Nunc non ante fringilla,  
manus potentis cario.
    - 1.1.1 Pellentesque servus  
morbi tristique.

Nechť již hříšné saxofony d'áblů rozzvučí síň úděsnými tóny waltzu, tanga a quickstepu! Nezvyčajné krdle šťastných figliarskych d'atľov učia pri kótovanom ústí Váhu mĺkveho koňa Waldemara obžierať väčšie kusy exkluzívnej kôry. The quick, brown fox jumps over a lazy dog. DJs flock by when MTV ax quiz prog. "Now fax quiz Jack!"



## Text blocks

*In plain, example, and **alert** flavour*

This text is highlighted.

### A plain block

This is a plain block containing some highlighted text.

### An example block

This is an example block containing some highlighted text.

### An alert block

This is an alert block containing some highlighted text.



# Definitions, theorems, and proofs

*All integers divide zero*

## Definition

$$\forall a, b \in \mathbb{Z} : a \mid b \iff \exists c \in \mathbb{Z} : a \cdot c = b$$

## Theorem

$$\forall a \in \mathbb{Z} : a \mid 0$$

## Proof

$$\forall a \in \mathbb{Z} : a \cdot 0 = 0$$





# Numerals and Mathematics

## Formulae, equations, and expressions

$$1234567890 \quad 1234567890 \quad \hat{x}, \check{x}, \tilde{a}, \bar{a}, \dot{y}, \ddot{y} \iint f(x, y, z) dx dy dz$$

$$\frac{1}{1 + \frac{1}{2 + \frac{1}{3 + x}}} + \frac{1}{1 + \frac{1}{2 + \frac{1}{3 + x}}}$$

$$F : \begin{vmatrix} F''_{xx} & F''_{xy} & F'_x \\ F''_{yx} & F''_{yy} & F'_y \\ F'_x & F'_y & 0 \end{vmatrix} = 0$$

$$\iint_{\mathbf{x} \in \mathbb{R}^2} \langle \mathbf{x}, \mathbf{y} \rangle \, \mathrm{d}\mathbf{x}$$

$$\overline{\overline{a\alpha^2 + \underline{b\beta} + \overline{\overline{d\delta}}}}$$

$$]0,1[ + \lceil x \rceil - \langle x, y \rangle$$

$$e^x \approx 1 + x + x^2/2! + x^3/3! + x^4/4!$$

$$\binom{n+1}{k} = \binom{n}{k} + \binom{n}{k-1}$$



## Figures

*Tables, graphs, and images*

Faculty	With T <sub>E</sub> X	Total	%
Faculty of Informatics	1 716	2 904	59.09
Faculty of Science	786	5 275	14.90
Faculty of Economics and Administration	64	4 591	1.39
Faculty of Arts	69	10 000	0.69
Faculty of Medicine	8	2 014	0.40
Faculty of Law	15	4 824	0.31
Faculty of Education	19	8 219	0.23
Faculty of Social Studies	12	5 599	0.21
Faculty of Sports Studies	3	2 062	0.15

Table: The distribution of theses written using T<sub>E</sub>X during 2010–15 at MU

## Figures

*Tables, graphs, and images*

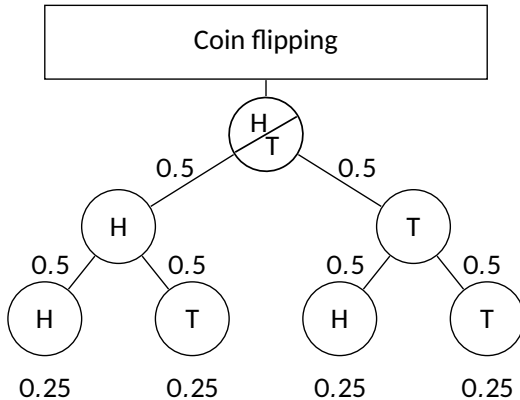


Figure: Tree of probabilities – Flipping a coin<sup>1</sup>

<sup>1</sup>A derivative of a diagram from [texample.net](https://www.texample.net) by cis, CC BY 2.5 licensed





## Code listings

### *An example source code in C*

```
#include <stdio.h>
#include <unistd.h>
#include <sys/types.h>
#include <sys/wait.h>

// This is a comment
int main(int argc, char **argv)
{
    while (--c > 1 && !fork());
    sleep(c = atoi(v[c]));
    printf("%d\n", c);
    wait(0);
    return 0;
}
```



## Citations

### *T<sub>E</sub>X*, *ΛT<sub>E</sub>X*, and Beamer

T<sub>E</sub>X is a programming language for the typesetting of documents. It was created by Donald Erwin Knuth in the late 1970s and it is documented in *The T<sub>E</sub>Xbook* [1].

In the early 1980s, Leslie Lamport created the initial version of ΛT<sub>E</sub>X, a high-level language on top of T<sub>E</sub>X, which is documented in *ΛT<sub>E</sub>X: A Document Preparation System* [2]. There exists a healthy ecosystem of packages that extend the base functionality of ΛT<sub>E</sub>X; *The ΛT<sub>E</sub>X Companion* [3] acts as a guide through the ecosystem.

In 2003, Till Tantau created the initial version of Beamer, a ΛT<sub>E</sub>X package for the creation of presentations. Beamer is documented in the *User's Guide to the Beamer Class* [4].



# Bibliography

## $T_{\text{E}}\text{X}$ , $\text{\LaTeX}$ , and Beamer

- [1] Donald E. Knuth. *The  $T_{\text{E}}\text{X}$ book*. Addison-Wesley, 1984.
- [2] Leslie Lamport.  *$\text{\LaTeX}$ : A Document Preparation System*. Addison-Wesley, 1986.
- [3] M. Goossens, F. Mittelbach, and A. Samarin. *The  $\text{\LaTeX}$  Companion*. Addison-Wesley, 1994.
- [4] Till Tantau. *User's Guide to the Beamer Class Version 3.01*. Available at <http://latex-beamer.sourceforge.net>.
- [5] A. Mertz and W. Slough. Edited by B. Beeton and K. Berry. *Beamer by example* In TUGboat, Vol. 26, No. 1., pp. 68-73.