How to Use the ELSAbeamer LaTeX Class

Kuan-Yu Chang

ELSA Lab, Department of Computer Science
National Tsing Hua University, Taiwan

June 14, 2021

Outline

Outline for Section 1

Unordered Lists

- item1
  - item1-1
  - item1-2
  - item1-3
- item2
  - item2-1
  - item2-2
  - item2-3
- item3
  - item3-1
  - item3-2
  - item3-3
- item4
  - item4-1
  - item4-2
  - item4-3
- item5
  - item5-1
  - item5-2
  - item5-3

Ordered lists

1. item1
   1. item1-1
   2. item1-2
   3. item1-3
2. item2
   1. item2-1
   2. item2-2
   3. item2-3
3. item3
   1. item3-1
   2. item3-2
   3. item3-3
4. item4
   1. item4-1
   2. item4-2
   3. item4-3
5. item5
   1. item5-1
   2. item5-2
   3. item5-3

Outline for Section 2

Text blocks

In plain, example, and alert flavour

This text is highlighted.

A plain block

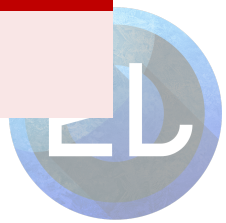
This is a plain block containing some highlighted text.

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

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

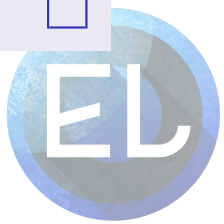
Theorem

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

Proof.

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

□



Outline for Section 3

Numerals and Mathematics

Formulae, equations, and expressions

$1234567890 \qquad 1234567890 \qquad \hat{x},\ \check{x},\ \tilde{a},\ \bar{a},\ \dot{y},\ \ddot{y} \qquad \iint f(x,y,z)\,\mathrm{d}x\mathrm{d}y\mathrm{d}z$

$$\frac{1}{1+\dfrac{1}{2+\dfrac{1}{3+x}}}+\frac{1}{1+\frac{1}{2+\frac{1}{3+x}}} \qquad F:\begin{vmatrix} F''_{xx} & F''_{xy} & F'_x \\ F''_{yx} & F''_{yy} & F'_y \\ F'_x & F'_y & 0 \end{vmatrix}=0$$

$$\iint_{\mathbf{x}\in\mathbb{R}^2}\langle \mathbf{x},\mathbf{y}\rangle\,\mathrm{d}\mathbf{x} \qquad \overline{\overline{a\alpha^2}+\underline{b\beta}+\overline{\overline{d\delta}}} \qquad]0,1[+\lceil x\rfloor-\langle x,y\rangle$$

$$e^x \approx 1+x+x^2/2!+ +x^3/3!+x^4/4! \qquad \binom{n+1}{k}=\binom{n}{k}+\binom{n}{k-1}$$

Outline for Section 4

Outline for Section 4

An example table

First Name	Last Name	Date of Birth
John	Doe	3/12/1920
Peter	Smith	6/5/1967
Julia	Jones	9/26/1977
Jane	Miller	10/5/1966
Peter	Smith	1/3/1901

Table: Personal data.

Outline for Section 4

Dummy Text

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

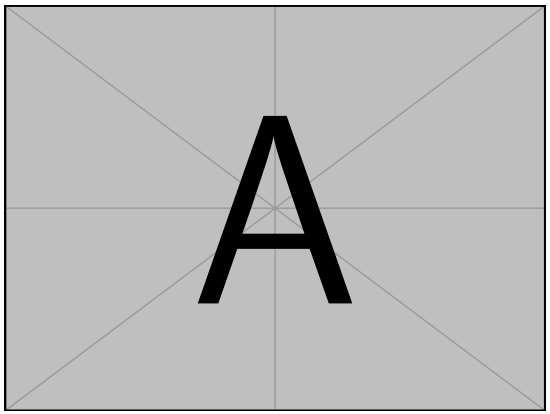


Figure: An example image.

Outline for Section 4

An example source code in C

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

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

Outline for Section 5

TeX, LaTeX, and Beamer

TeX 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 TeXbook* [1].

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

In 2003, Till Tantau created the initial version of Beamer, a LaTeX package for the creation of presentations. Beamer is documented in the *User's Guide to the Beamer Class* [4].

Bibliography I

[1] D. E. Knuth and D. Bibby, *The texbook*, vol. 15. Addison-Wesley Reading, 1984.

[2] L. Lamport, *LATEX: a document preparation system: user's guide and reference manual*. Addison-wesley, 1994.

[3] F. Mittelbach, M. Goossens, J. Braams, D. Carlisle, and C. Rowley, *The LATEX companion*. Addison-Wesley Professional, 2004.

[4] T. Tantau, J. Wright, and V. Miletic, "User guide to the beamer class," 2004.