Sample LaTeXDocument

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Contents

1 Spaces

It does not matter whether you enter one or several spaces after a word.

An empty line starts a new paragraph.

Forcing a linebreak
Ooga BOOGA

The diacritic $\hat{\text{j}}$ vs the ˆ

2 Section

2.1 Subsection

2.1.1 Subsubsection

Cannot go any lower.

unnumbered subsubsection

I have no number!

3 Font Styles

We can change fonts using the following commands, *Emphasized*, `Monospaced Font`, Small Capitals, UPPERCASE

4 Font Size

Within the same scope, we can change the font size as follows , me is ooga, smally, normal, OOGA BOOGA, OOGA BUNGA

5 Non-breaking space

How we can use the ˜ to do a non-breaking space. Observe that this really-longword will break. Now let's use ˜.

How we can use the ˜ to do a non-breaking space. Observe that this really longword will break. Now let's use ˜.

But in practice, I would not recommend this. Just let LaTeX do the formatting for you. Unless it really breaks your immersion. We can also use this in math equations.

Compare the two lines below
$f(x) = x^2 \quad \text{for} x > 0$
$f(x) = x^2 \quad \text{for } x > 0$

6 Line Spacing

Jotham Wong
Jotham

Wong JothamWong

This paragraph has

huge gaps

between lines.

7 Quote-marks

'quote' vs "quote"

8 Paragraph Alignment

I am flushed left.

I am flushed right.

Hello I am centered

9 Verbatim

We begin the verbatim environment.

```
The verbatim environment
    simply reproduces every
character you input,
including all s p a c e s!
```

10 Code Blocks

Using `minted` package to write code blocks.

```python
# This is python code
def factorial(n):
    return n == 1 ? 1 : n * factorial(n-1)
```

```java
// This is java code
public int factorial(int n) {
    if (n == 1) {
        return 1;
    } else {
        return n * factorial(n-1);
    }
}
```

Notice the syntax highlighting. (Basically verbatim + syntax)

11 Math fun

Short hand equations:

$$e^{i\pi} + 1 = 5$$

The equivalent with explicit environment command (and numbered equation)

$$e^{i\pi} + 1 = 0 \tag{1}$$

12 Citing stuff

LaTeXis a set of macros built upon TeX[1].

References

[1] Donald E. Knuth. *The TEX Book*. Addison-Wesley Professional, 1986.