

Testing HTML Export with tex4ht

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Abstract


Your abstract. Ça va? (Yes accented characters work.)

1 Overview of Steps

1. I tweaked the `latexmkrc` file so that `htlatex` is run along with `pdflatex`, so the HTML export is done only if you set your project to be compiled with `pdflatex`.

(`htlatex` doesn't work with `fontspec`; I haven't time to try this workflow with XeLaTeX nor LuaLaTeX yet. So let's just leave it at `pdflatex` first, yeah?)

2. `my.cfg` contains the settings I usually use in my workflow:
 - Output math as MathML, and render it in browsers using MathJax.
 - When `\includegraphics` uses `.jpg`, `.png`, `.jpeg`, `.svg`, use the files directly for the HTML without conversion.
 - When `\includegraphics` uses `.eps` and `.pdf`, convert them to `.png` using ImageMagick `convert`, and use those for the HTML.
 - Tikz drawings are output as `.svg` without any extra settings, *but* you'll need a patched `pgfsys-tex4ht.def` in your project.
 - I've included some CSS styling. You can add a separate `.css` file for further styling.

3. When compilation is complete (it'll probably take longer than usual ;-)), click on the  button next to Download as ZIP, and select the option 'Input and Output Files'.

The `.zip` file should contain the generated `.html` file.

1.1 Caveats

- This is an experimental hacky hack – things may just not work! More a proof-of-concept rather than a stable solution on Overleaf at present.
- `tex4ht` doesn't work with `fontspec` nor `authblk`.
- Avoid `\mathbf` – this broke MathML and MathJax for me.
- Avoid, or re-define the `multicol` environment to do nothing – `tex4ht` will really export text in two or three columns *by PDF page*, and it's not the most readable.

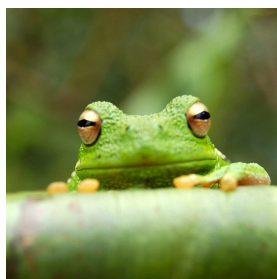


Figure 1: This frog was uploaded to Overleaf via the project menu. The `.jpg` file will be used as-is in the HTML export.



Figure 2: PDF images will be converted to PNG when exported to HTML.

2 Introduction

Your introduction goes here! Some examples of commonly used commands and features are listed below, to help you get started. If you have a question, please use the help menu (“?”) on the top bar to search for help or ask us a question.

3 Some L^AT_EX Examples

3.1 How to Include Figures

First you have to upload the image file (JPEG, PNG or PDF) from your computer to writeLaTeX using the upload link the project menu. Then use the `includegraphics` command to include it in your document. Use the figure environment and the caption command to add a number and a caption to your figure. See the code for Figure 1 in this section for an example.

3.2 How to Make Tables

Use the `table` and `tabular` commands for basic tables — see Table 1, for example.

3.3 How to Write Mathematics

L^AT_EX is great at typesetting mathematics. Let X_1, X_2, \dots, X_n be a sequence of independent and identically distributed random variables with $E[X_i] = \mu$ and

Item	Quantity
Widgets	42
Gadgets	13

Table 1: An example table.

$\text{Var}[X_i] = \sigma^2 < \infty$, and let

$$S_n = \frac{X_1 + X_2 + \cdots + X_n}{n} = \frac{1}{n} \sum_i^n X_i$$

denote their mean. Then as n approaches infinity, the random variables $\sqrt{n}(S_n - \mu)$ converge in distribution to a normal $\mathcal{N}(0, \sigma^2)$.

In this HTML export example, math is output as MathML, and will be rendered using MathJax.

3.4 How to Make Sections and Subsections

Use section and subsection commands to organize your document. \LaTeX handles all the formatting and numbering automatically. Use `ref` and `label` commands for cross-references.

3.5 How to Make Lists

You can make lists with automatic numbering ...

1. Like this,
2. and like this.

...or bullet points ...

- Like this,
- and like this.

...or with words and descriptions ...

Word Definition

Concept Explanation

Idea Text

4 Tikz Drawings

TikZ drawings will be output as SVG, which should be rendered by most modern browsers. However you need to use a patched copy of `pgfsys-tex4ht.def` for things to work.

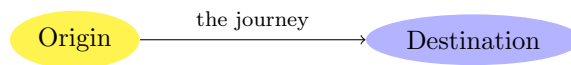


Figure 3: TikZ drawings will be output as SVG, which should be rendered by most modern browsers.

5 References and Citations

Here are some natbib examples. You can cite examples using the citation key [Trang and Mebkhout, 1983] in your .bib file. (On Overleaf, you can access the .bib file via the Project menu.) There are commands for in-text citations, like Goresky and MacPherson [1981]. And you can pass an option to specify additional details, such as a page or chapter number, as an option [Fulton, 1983, p. 130].

We hope you find Overleaf useful, and please let us know if you have any feedback using the help menu above.

References

- William Fulton. Introduction to intersection theory in algebraic geometry. In *Regional Conference Series in Mathematics*, number 54, 1983.
- Mark Goresky and Robert MacPherson. On the topology of complex algebraic maps. In *Algebraic Geometry Proceedings, La Rábida, Lecture Notes in Mathematics*, number 961, 1981.
- Lê Dũng Trang and Zoghman Mebkhout. Variétés caractéristiques et variétés polaires. *C. R. Acad. Sc. Paris*, 296:129–132, 1983.