

CS 124 Operating Systems

1 Lecture notes template

This template was meant to be used for lecture notes. It has a lot of useful shorthand commands, packages and settings defined to make lecture note writing an effortless process. Refer to section 2 for some examples.

2 Features

Most of the features of this template come from different TeX snippets defined in the `latex-common` Rammy module. Check [its GitHub page](#) for the full list of available snippets.

2.1 Snippet: compact-header

The small header you see at the top of this page is a part of this template. You can customise its content by (re)defining the `\HeaderTitle` command.

This snippet also defines the page margins.

2.2 Snippet: symbols

This template includes a lot of useful Math symbols. Here's a quick preview:

$\mathbb{R}^n \times \mathbb{R}^m$	$M_{r \times k}$	$\mathbb{C}, \mathbb{Z}, \mathbb{Q}$
$f : \mathbb{R}^n \rightarrow \mathbb{R}$	$\left. \frac{df}{dt} \right _{t=4}$	$A \otimes B$
$\langle v, u \rangle$	$\langle \cdot, \cdot \rangle$	$\ * \ A$
$\mathbb{E}[x]$	$U \perp\!\!\!\perp V$	$\Pr(x y)$

See the source code of the `symbols` snippet for more info.

2.3 Snippet: code

As the name implies, this snippet adds a bunch of code-related features. Code snippets should be inserted using the `lstlisting` environment:

```
/**
 * This code snippet was taken from Rammy CLI tests.
 */
describe('rammy init', () => {
  it('should succeed in an empty directory', () => {
    TU.removeFixture(configName);
    assertRammyCommand('init', 0);
    assert.isTrue(TU.hasFixture(configName), 'Config file was not created!');
  });
  it('should fail when a project has already been initialised', () => {
    assertRammyCommand('init', 1);
  });
});
```

Additionally, the `\code` command can be used to insert inline code snippets.

2.4 Other snippets and features

This template has coloured links: <https://github.com/TimbokZ/latex-common>. It also supports long matrices:

$$Z = \begin{bmatrix} q_{sum1} & q_{sum2} & q_{sum3} & 0 & 0 & 0 & 0 & 0 & 0 & m & 0 & 0 \\ 0 & 0 & 0 & q_{sum1} & q_{sum2} & q_{sum3} & 0 & 0 & 0 & 0 & m & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & q_{sum1} & q_{sum2} & q_{sum3} & 0 & 0 & m \\ x_{11} & x_{21} & x_{31} & 0 & 0 & 0 & 0 & 0 & 0 & q_{sum1} & 0 & 0 \\ x_{12} & x_{22} & x_{32} & 0 & 0 & 0 & 0 & 0 & 0 & q_{sum2} & 0 & 0 \\ \\ \\ \\ \\ \\ 0 & 0 & 0 & 0 & 0 & 0 & x_{13} & x_{23} & x_{33} & 0 & 0 & q_{sum3} \end{bmatrix}$$

This template doesn't use standard \LaTeX fonts - it uses a sans-serif font for the main text and Inconsolata as the monospace font. The packages needed for common figure functionality are also included via the `figures` snippet.