A customised LaTeX article class

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The aim of the `adharticle` LaTeX class is to provide a simple and clean way to set up the document as I like it. This could easily be achieved through the LaTeX document header, but giving by combining these settings into a class:

1. The need to duplicate options and settings in each document is avoided,

2. If the settings are changed, they need only be modified in one location and all documents using this class may be recompiled without modification.

This class will be used primarily for long form writing, producing A4 documents with a layout aimed at reading longer text. It will give a good typesetting for reading and will include all necessary packages for typesetting maths, tables, Greek/Hebrew text and source code.

1 Compilation

The `adharticle` class is designed for use with LaTeX and XƎLaTeX, usually producing PDF files. The option `--shell-escape` must be provided to the compiler as the `minted` package calls external commands.

2 Class Options

The following options are available to the `adharticle` document class:

fullpage If `fullpage` option is present, use the fullpage package[1]. This reduces the margin sizes on all sizes to 1 in.

paper/electronic If `paper` is set, the document is intended for printing on paper. If `electronic` is set, the document is intended for viewing electronically (probably PDF). The default settings reflect the medium of intended use. A script should be written to produce both if necessary to avoid 2 versions of the files floating around. Default to electronic behaviour.

3 Included Packages and Settings

This section details the packages used in the `adharticle` class and their settings.

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[1] http://www.ctan.org/pkg/fullpage

3.1 inputenc

The `inputenc` package[2] allows use of different file encodings for the LaTeX file. This is set by:

```
\RequirePackage[utf8]{inputenc}
```

Using the `utf8` encoding allows Unicode characters to be easily inputted, especially useful for including Greek text or other non-western characters.

3.2 babel

The `babel` package[3] provides support for language specific hyphenation patterns and also culturally and linguistically determined typographical rules. Babel is configured by:

```
\RequirePackage[greek,english]{babel}
```

Babel is configured to provide support for Greek and for English, with English as the default. Use:

```
\selectlanguage{Greek}
```

to change to Greek (or other languages as appropriate), and similarly back to English.

3.3 color

The `color` package[4] provides colour management. Standard colour set is provided, new colours may be defined using:

```
\definecolor{name}{model (e.g. rgb)}{colour specification}
```

Colours may then be applied to text or other elements. Especially useful when drawing pictures with Tikz/pgf.

3.4 graphicx

The `graphicx` package[5] allows inclusion of graphics in the document. A graphic may be included by giving the command:

3.5 placeins

The `placeins` package defines the command `\FloatBarrier` which stops floats from moving past.

3.6 amssymb, amsmath

The packages `amssymb` and `amsmath` provide support for additional symbols and mathematical notation.

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[2] http://ctan.org/pkg/inputenc
[3] http://ctan.org/pkg/babel
[4] http://ctan.org/pkg/color
[5] http://ctan.org/pkg/graphicx

3.7   ctable

`ctable` is a powerful table package which uses `booktabs` to make a nice looking table and also provides footnotes for the table. Default values for options of `ctable` are set in the class file.

3.8   minted

The `minted` package provides syntax highlighting for source code included in the document, along with a number of other useful features for including code.

3.9   fancyvrb

The `fancyvrb` package provides a more powerful version of the `verbatim` environment.

3.10   microtype

The `microtype` package provides access to micro-typographical extensions to improve document layout.

3.11   hyperref

Makes references in the document into clickable hyperlinks for easy navigation. Only used for documents intended for electronic files (not for paper documents). For example, a reference to Section 1. Internet links can also be used: google.