

NAME

WebQuiz: a LaTeX package for writing online quizzes –

WebQuiz makes it possible to use *LaTeX* to write interactive online quizzes. The quizzes are first written in *LaTeX* and then converted into HTML using *WebQuiz*, which is written in python. The conversion from *LaTeX* to HTML is done behind the scenes using *TeX4ht*. The idea is that you should be able to produce nice online quizzes using *WebQuiz* and basic knowledge of *LaTeX*.

WebQuiz is designed to be used from the command–line. For example, if *quiz1.tex* is a LaTeX file for a quiz then:

latex quiz1

produces a "readable" DVI file for the quiz

pdflatex quiz1

produces a "readable" PDF file for the quiz

webquiz quiz1

creates the web page *quiz1.html*

If you prefer to use *LaTeX* from a GUI for *LaTeX* then it should be possible to configure it to use *WebQuiz* directly. As an example, the manual provides some details about how to do this for TeXShop.

USAGE

usage: **webquiz** [**-h**] [**-q**] [**-d**] [**-s**] [**--latex** | **-l** | **-x**] [**-r** **RCFILE**]
 [**-i** | **-e** | **--settings** [**SETTINGS**]] [**quiz_file** [**quiz_file** ...]]

A LaTeX package for writing online quizzes

positional arguments:

quiz_file latex quiz files

optional arguments:

-h, --help

show this help message and exit

-q, --quiet

Suppress tex4ht messages (also -qq etc)

-d, --draft

Use make4ht draft mode

-s, --shell-escape

Shell escape for tex4ht/make4ht

--latex

Use latex to compile document with make4ht (default)

-l, --lua

Use lualatex to compile the quiz

-x, --xelatex

Use xelatex to compile the quiz

- r *RCFILE*, --rcfile *RCFILE***
Specify location of the webquiz rc-file
- i, --initialise**
Install web components of webquiz
- e, --edit-settings**
Edit default settings for webquiz
- settings <*SETTINGS*>**
List default settings for webquiz

INSTALLATION

To use *WebQuiz* you need to have a standard *LaTeX* distribution installed, such as *TeXLive*, that includes *TeX4ht*. In addition, you need to have *Python3* installed. As *WebQuiz* uses scalable vector graphics (SVG) you should check that all of the dependencies of *dvisvgm* are installed on your system, especially if you plan on using graphics or images.

Once the TeX components of *WebQuiz* package have been installed you can install the web components of *WebQuiz* using the following command, which needs to be run from the command line:

```
> webquiz --initialise
```

If you want to install the web components of *WebQuiz* into a system directory then you need to run this command from an administrators account, so using *sudo* on a unix-like system. For more details about the installation and configuration of *WebQuiz* please see Section 3.2 of the *WebQuiz* manual.

Please see the manual for more details about initialising and using *WebQuiz*.

INSTALLATION FROM CTAN

If you are installing *WebQuiz* using the zip file from ctan, as opposed to installing the package from TeX distribution like *TeXLive*, then the following steps are recommended:

- Create a symbolic link, or equivalent, to the main *WebQuiz* executable, which is the file *webquiz.py* in the scripts directory
- Copy the latex directory to somewhere in TeX search path, or set your *TEXINPUTS* environment variable appropriately, and then run *mktexlsr* or equivalent so that LaTeX and *WebQuiz* can find these files.
- Ideally the doc subdirectory should be copied into the doc/layetx subdirecory of the main TeX distribution.

If you are using a unix system, or macosx, there is an (undocumented) command-line option *--tex-install* that installs the three different components of *WebQuiz* into the standard locations in the *TeXLive* tree:

- *\$TEXMFMAIN/tex/latex/webquiz* all LaTeX files
- *\$TEXMFMAIN/scripts/webquiz* the python programs
- *\$TEXMFMAIN/doc/latex/webquiz* the documentation and web components

- A symbolic link is made from the TeX bin directory to the main WebQuiz executable `$TEXMFMAIN/scripts/webquiz/webquiz.py`

To install these files in TEXMFMAIN you will almost certainly need administrator or root privileges, so on a unix-like system you will need to use:

```
> sudo webquiz/scripts/webquiz --tex-install
```

In principle, this command may also work on a windows computer, provided that the command *kpsewhich* is available, but this is untested.

Once the files above are in place initialise WebQuiz by following the installation instructions above.

Mainly for development purposes, there is another undocumented command-line option for removing these files from TEXMFMAIN:

```
> sudo webquiz/scripts/webquiz --tex-uninstall
```

SYSTEM REQUIREMENTS

In order to work WebQuiz needs the following programs to be installed on your system:

- An up-to-date *LaTeX* distribution, such as that provided by *TeXLive*. In particular, you need to have *TeX4ht* and *make4ht* installed. Unfortunately, since TeXLive 2018 was released there have been a significant number of updates to a number of packages that *WebQuiz* uses, including updates to *TeX4ht*, *make4ht*, *tikz* and *pstricks*. For this reason, *it is strongly recommended that you install all packages from ctan_ before using WebQuiz_*.
- *python3* As of writing python 3.7.2 is available.
- *Javascript*
- If you plan to use *pstricks* with *WebQuiz*, or if you want to compile the online manual for WebQuiz, then you need to ensure that *ghostscript* and *dvisvgm* are installed and properly configured on your system. See the *WebQuiz* manual and the *dvisvgm* documentation for more details
- A web server. To view online quizzes you of course need a web server. As described in the **Installation** section you will also need to copy of the *WebQuiz* components onto your web server using the command:

```
> webquiz --initialise
```

AUTHORS

The LaTeX component of *WebQuiz* was written by Andrew Mathas and the python, css and javascript code was written by Andrew Mathas (and Don Taylor), based on an initial prototype of Don Taylor's from 2001. Since 2004 the program has been maintained and developed by Andrew Mathas. Although the program has changed substantially since 2004 Don's idea of using TeX 4ht, and some of his code, is still very much in use.

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