PreTeXt Quick Reference: Command Line Interface (CLI)

CLI version 2.0.0, 2023-09-12

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Setup

Check requirements

 $\underline{\text{Note:}}$ python might be called python3 if you have MacOS or Linux.

python --version : the CLI requires Python version
3.8 or later

pip --version : pip is the package installer for Python
xelatex --version : some PreTeXt features require
IATEX

Install PreTeXt

python -m pip install pretext : install PreTeXt
pretext --version : check version to verify install

Create a new project

pretext new book : creates a new PreTeXt book in new-pretext-project

pretext new article : creates a new PreTeXt article
new-pretext-project

Update a project to use the CLI

pretext init: creates project manifest (project.ptx), and publication file (publication/publication.ptx). Edit these files appropriately before proceeding. pretext pretext init --refresh: creates new copies of project manifest and publication file to compare for new features.

Upgrade PreTeXt

python -m pip install --upgrade pretext: upgrade to latest stable release

Get Help

pretext --help: show general help
pretext build --help: show help for build command.
Each subcommand has its own help.

Basic Usage

Build a PreTeXt document

pretext build: Builds the project to the format of the first target in project.ptx. pretext build print: Create pdf version (assuming <target name="print">) is in project.ptx

Generate source images and WeBWorK

If your book has any WeBWorK, latex-image, asymptote, sageplot, interactive, etc. assets will be generated on each build. You can generate separately with:

pretext generate: Generate all assets for first target in project.ptx.

pretext generate webwork: Generate webwork for first target in publication.ptx

pretext generate sageplot -t print: Generate sageplot for target "print".

pretext generate latex-image -x img-graph1:

Generate latex-image with xml:id "img-graph1" (for first target).

View a PreTeXt document (local)

pretext view: Creates a local server to preview the first target in project.ptx protext view print: Views the "print" target

pretext view print: Views the "print" target

Deploy to GitHub Pages

pretext deploy : deploys Git-managed project to GitHub Pages

Project Manifest The file project.ptx describes your build targets. Each target has a *name* (e.g. "print-latex") that you build or view with, e.g. pretext build print-latex.

Structure of a target:

<target name="web" format="html"\>

format can be html, latex, pdf, custom, epub, kindle, or braille

Additional attributes:

source is the path to the root ptx document. Default: source/main.ptx

publication is the path to the publication file. Default
publication/publication.ptx

output-dir is the path the folder that will hold output. Default is output/[target name]

Recommended Project Structure

assets: Contains all static assets.

generated-assets: Contains the products of running pretext generate. Should not be edited manually.

output: Contains the products of running **pretext build**. Should not be edited manually.

publication: Contains your publication file(s) (e.g. publication/publication.ptx).

source: Contains your PreTeXt source file(s) (e.g. source/main.ptx).

project.ptx: Describes your project's targets (e.g. web, print-latex) and executables.

requirements.txt: Specifies version of CLI used to build
your project.

.gitignore: Specifies files not shared publicly when using Git or pretext deploy.