

1 OER-Forge

Build, share, and improve WCAG-compliant Open Educational Resources with Python!

Jump to Font Controls

1.1 Welcome

OER-Forge is an open source Python toolkit for building, organizing, and publishing accessible Open Educational Resources (OERs). Our goal: make it easy and fun to create sites and documents that meet [WCAG](#) standards.

- **Accessible by design:** All templates and outputs aim for [WCAG compliance](#).
- **Database-driven navigation:** Section indices, menus, and hierarchy are managed in SQLite for robust, extensible site structure.
- **Multi-format input:** Write content in Markdown, DOCX, and Jupyter Notebooks.
- **Multi-format export:** Markdown, DOCX, PDF, LaTeX, and TXT.
- (optional) **Validation using Pa1ly:** Automated checks and open reporting during and after build to ensure compliance. [Pa1ly on GitHub](#)

1.2 Get Started

1. Clone the repo:

```
git clone https://github.com/OER-Forge/OER-Forge.git
cd OER-Forge
```

2. (optional) Create a virtual environment and activate it:

```
python -m venv venv
source venv/bin/activate
```

On Windows use:

```
python -m venv venv
venv\Scripts\activate
```

3. Install dependencies:

```
pip install -r requirements.txt
```

4. Build the sample site:

```
python build.py
```

5. View your site: Open build/index.html or docs/index.html in your browser.

1.3 Features

1.3.1 Accessibility & Usability

- **Accessible by design:** ARIA labels, alt text, color contrast, and keyboard navigation.
- **Adjustable interface:** User controls for text size, spacing, and layout.
- **Dark mode:** Toggle theme for better readability.
- **Responsive design:** Mobile-friendly layouts and navigation.

1.3.2 Content & Input Formats

- **Multi-format input:** Markdown, DOCX, Jupyter Notebooks
- **Tables & lists:** Advanced Markdown tables, nested lists, and task lists.
- **Inline figures:** Markdown images with alt text for accessibility.
- **Math support:** LaTeX-style math rendering with MathJax.
- **Syntax highlighting:** Beautiful code blocks with Pygments.

1.3.3 Navigation & Structure

- **Section indices & navigation:** Database-driven, supports arbitrary hierarchy, top-level and nested menus.
- **Cross-references:** Link sections, figures, tables, and listings easily.
- **Footnotes & endnotes:** Standard Markdown syntax for notes.

1.3.4 Export & Download

- **Download options:** Export pages in multiple formats (PDF, DOCX, TXT, etc.).

1.3.5 Citations & References

- **Citations & references:** Manage bibliographies with BibTeX.

1.3.6 Presentation & Customization

- **Callouts & alerts:** Styled boxes for tips, warnings, and important info.
- **Extensible templates:** Jinja2-based, easy to customize.

1.3.7 Build System

- **Robust build system:** Automated, logs to `log/` for debugging.

1.4 Documentation

[Comprehensive documentation](#) is available and hosted on [GitHub](#).

A dark gray rectangular badge with the word "license" in white on the left and "CC BY-NC-SA 4.0" in white on the right.

Figure 1: License

1.5 Get Involved

We welcome your feedback, suggestions, and contributions! Please use [GitHub Issues](#) to report bugs, request features, or ask questions.

- **Contribute a Pull Request:** [Help wanted](#)
- **Report a bug:** [File an issue](#)
- **Request a feature:** [File an enhancement](#)
- **Ask a question:** [Open a question](#)

1.6 License

Content and code are licensed under CC BY-NC-SA 4.0.

1.7 Getting OER-Forge

OER-Forge is hosted on [GitHub](#).

A row of GitHub repository statistics. It includes: "last commit" with a green "today" badge, "code size" with a blue "2.6 MiB" badge, "contributors" with a red "1" badge, a "Stars" badge with a gray "1" badge, "issues" with an orange "6 open" badge, and "pull requests" with an orange "1 open" badge.

last commit today code size 2.6 MiB contributors 1 Stars 1 issues 6 open pull requests 1 open