BITS & BYTES

SMALL UNITS OF ORGANIZED KNOWLEDGE.

Repo User Guide

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Introduction

This repository demonstrates how to use **Sphinx** for building documentation in two formats:

- A **multi-page** document intended for detailed documentation and printable PDFs.
- A **single-page** document designed for fast reference.

You can build the documents in both **HTML** and **PDF** formats using the provided *Makefile*.

This guide walks you through the setup, customization, and generation process.

Usage

2.1   Directory Structure

The main components of this repo are:

- *multi-pgs-src/*: Contains reStructuredText files for the multi-page guide.
- *single-pg-src/*: Contains content for the one-page quick guide.
- *_preamble/*: Custom LaTeX preambles and title pages.
- *_figs/*: Logo assets used in the documentation.
- *_fonts/*: Custom fonts (e.g., Montserrat) used for PDF output.
- *_static/* and *_templates/*: CSS and HTML template overrides.
- *output-dir/*: Stores final output files.
- *Makefile*: Automates building guides.

2.2   Build Commands

Set the appropriate environment variable and run the following commands:

Multiple Pages Guide:

```
export BUILD_MULTI_PGS=1
make multi-pgs-html          # Generates multi-page HTML
make make multi-pgs-pdf      # Generates multi-page PDF
```

Single Page Guide:

```
make single-pg-html     # Generates single-page HTML
 make single-pg-pdf     # Generates single-page PDF
```

Cleanup Commands:

```
make clean              # Removes intermediate files
make clean-all          # Removes all builds and outputs
```

Installing Sphinx and Tools

To use this template, install the following dependencies:

3.1   Python & pip

Make sure Python and pip are installed:

```
python3 --version
pip3 --version
```

Install Sphinx and extensions:

```
pip install sphinx sphinx_rtd_theme
```

Optional (for PDF output using LaTeX):

```
sudo apt install texlive-latex-base texlive-latex-recommended \
                 texlive-fonts-recommended texlive-latex-extra \
                 texlive-xetex lualatex
```

You'll also need:

- *lualatex*: Required for rendering custom fonts and logos
- A terminal that supports *make* (or run equivalent commands manually)