Welcome to SheetMusicViewer!

A cross-platform PDF sheet music viewer
by Calvin Hsia (2019, updated 2025)

This sample PDF will help you learn
how to use the application.

Features:
  - Display 1 or 2 pages at a time
  - Mark pages as Favorites
  - Add ink annotations with stylus/finger
  - Table of Contents support
  - Supports multi-volume PDF sets

Getting Started

To use your own PDF sheet music:

1. Run the program and choose a path to a
   root folder containing PDF music files.

2. PDFs can contain 1-N pages.

3. The PDFs are never altered by the program.
   All auxiliary data (TOC, Favorites, Inking,
   LastPageNumberViewed) is stored in JSON files.

4. The program needs write permission to write
   the JSON metadata files alongside your PDFs.

Press Alt+C to open the Music Chooser dialog.

Multi-Volume PDF Support

Large books can be scanned to multiple PDFs:

NAMING CONVENTION:
  book.pdf (or book0.pdf) - first volume
  book1.pdf   - second volume
  book1a.pdf   - insert after book1
  book2.pdf   - third volume

All volumes with same root name are treated
as one continuous book!

Example: SonatenI.pdf and SonatenI1.pdf form
one book, while SonatenII.pdf is separate.

This allows rescanning pages without
renumbering subsequent volumes.

Singles Folders

A subfolder ending in 'Singles' (like 'GershwinSingles') treats each PDF as a single song with possibly multiple pages.

SINGLES FOLDER FEATURES:
  - Maintained in alphabetical order
  - First page of first song is the icon
  - Dynamically updates as items are added, removed, or renamed
  - TOC entries auto-adjust

A subfolder called 'Hidden' will not be searched.

TIP: Create a custom PDF title page that sorts first alphabetically for the icon.

Display Modes & Navigation

TWO DISPLAY MODES:
  - Single page per screen
  - Two pages (side by side) per screen

NAVIGATION:
  - Thumb arrows: Move by screenful
    (or jump to next/prev favorite)
  - Arrow keys: Move by 1 screenful
  - Bottom quarter: Tap to turn pages

IN 2-PAGE MODE:
  Bottom is divided into 4 quarters.
  Outer quarters: advance 2 pages
  Inner quarters: advance 1 page

Top 3/4: Zoom/pan with two fingers

Instant Page Turns

Musicians need INSTANT page turns!
You can't pause mid-performance to wait.

THE CHALLENGE:
PDF rendering takes 100-500ms per page.
That's too slow for live performance.

THE SOLUTION: Predictive Caching

SINGLE PAGE MODE (showing page 5):
  Already cached: pages 4, 6, 7
  Turn to page 6 -> page 8 starts loading

TWO PAGE MODE (showing pages 5-6):
  Already cached: pages 3, 4, 7, 8
  All page turns are instant!

Result: Page turns feel like real paper.

Inking & Annotations

Inking is off by default.

TO INK A PAGE:
1. Click the Ink checkbox for the page
   (in 2-page mode, each page has its own)
2. Draw with mouse, pen, or finger
3. Right-click for color options:
   - Black pen
   - Red pen
   - Yellow highlighter
4. Click Ink checkbox again to save

TIP: Zoom in before inking for accuracy
when correcting typos on the musical staff.

All ink is stored in the JSON metadata file.

Performance & Memory

CACHE MANAGEMENT:
  - Automatic based on available memory
  - Least-recently-used pages evicted first
  - Multi-volume: volumes load as needed

MULTI-VOLUME BOOKS:
For volumes with 100+ pages each, boundary
pages are pre-cached:
  - Last pages of current volume
  - First pages of next volume

MEMORY-HUNGRY PDFs:
Some high-resolution scans use lots of RAM.
To reduce size:
  1. Print to 'Microsoft Print to PDF'
  2. Use an online PDF resizer tool

This creates a smaller, optimized PDF.

PDF Table of Contents

Edit the TOC by clicking the thumbnail
to the right of the slider, or press Alt+E.

TOC FEATURES:
   - Import/export to clipboard (Excel format)
   - Add composer, date, notes
   - OCR a scanned TOC for import

PAGE NUMBER OFFSET:
Physical page numbers in scanned books may
not match PDF page numbers (due to cover
pages, intros, etc.).

PageNumberOffset maps between them so the
imported TOC doesn't need adjustment.

About SheetMusicViewer

Created by Calvin Hsia
Email: calvin_hsia@alum.mit.edu
Website: http://calvinhsia.com

I have hundreds of piano music books
collected over decades, kept on OneDrive.

I digitized 30,000+ pages of music using
a Xerox WorkCentre scanner.

I really love Ragtime! There's something
so binary about it: powers of 2, 16 measures
per verse, 2/4 time, syncopation.

Enjoy your music!
- Calvin