

Md2Script-Script

INT. DIGITAL WORKSPACE - DAY

Screen recording shows markdown text transforming into a professional screenplay PDF.

NARRATOR

(excited, urgent)

What if I told you that every
screenplay you've ever seen follows
an incredibly strict format...

Quick cuts of professional screenplays from Final Draft and industry scripts flash across the screen.

NARRATOR

...and that we built a tool to
automate it entirely using AI pair
programming?

Markdown syntax highlighting appears, then transforms smoothly into a formatted PDF.

CUT TO:

INT. STUDIO - DAY

TITLE CARD

The title "Building ScriptMD2PDF with Claude Code" animates onto screen.

NARRATOR

(confident)

Today I'm showing you how we built
ScriptMD2PDF with Claude Code—and
why this changes everything about
AI-assisted development.

Claude Code interface and terminal windows appear on screen.

CUT TO:

INT. STUDIO - CONTINUOUS

NARRATOR

(conversational)

Here's the thing about writing
screenplays: the formatting is
brutal.

SPLIT SCREEN

Complex screenplay software Final Draft on the left, ruler measurements on the right.

Md2Script-Script

NARRATOR

You've got scene headings at 1.5 inches from the left. Dialogue at 2.5 inches. Character names at 3.5 inches.

Animated rulers appear showing exact measurements.

NARRATOR

And if you get it wrong? Your script looks immediately unprofessional.

NARRATOR

(frustrated tone)

Traditional solutions? Either expensive software like Final Draft that costs hundreds of dollars—

Final Draft pricing page appears on screen.

NARRATOR

—or complex LaTeX templates that require a computer science degree to configure.

LaTeX code with complicated syntax fills the screen.

NARRATOR

(solution tone)

But what if you just want to write in markdown—the simplest, most portable format on earth—and get a perfectly formatted screenplay PDF out the other end?

A clean, simple markdown editor with screenplay text appears.

NARRATOR

That's exactly what we built. And we did it with Claude Code as our AI pair programmer.

CUT TO:

INT. DIGITAL WORKSPACE - DAY

SIDE-BY-SIDE VIEW

Markdown source on the left, rendered PDF on the right, synchronized scrolling.

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NARRATOR

(enthusiastic)

ScriptMD2PDF is a Python-powered conversion tool that takes screenplay-flavored markdown and outputs production-ready PDFs that follow industry-standard formatting.

NARRATOR

Here's what the syntax looks like:

CLOSE ON

Code example with syntax highlighting appears:

INT. KITCHEN - DAY

The morning light filters through venetian blinds.

ALEX

(whispering)

Did you hear that?

JORDAN

We need to leave. Now.

CUT TO:

NARRATOR

(clear, instructional)

Three hash marks for scene headings. At-symbol for character names. Double arrows for transitions. That's it.

LIVE DEMO

Typing markdown, instant PDF preview updating in real-time.

NARRATOR

The tool handles all the heavy lifting: proper margins, bold scene headings, monospaced fonts, page breaks—everything a professional screenplay needs.

CUT TO:

INT. STUDIO - DAY

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NARRATOR

(building excitement)

But here's where it gets really
interesting. We didn't just build a
PDF converter. We built an entire
production pipeline tool.

Multiple terminal windows showing different export formats
appear.

NARRATOR

Shot list generation—extracts every
scene and shot heading into
structured tables.

Shot list PDF with scene breakdown table appears on screen.

NARRATOR

Markdown, CSV, or PDF format. Your
choice.

NARRATOR

Entity extraction—automatically
catalogs every character, location,
and prop mentioned in your script.

Entity inventory showing categorized characters and
locations displays.

NARRATOR

Final Cut Pro integration—exports
FCPXML timelines with scene markers
and shot keywords.

Final Cut Pro timeline with imported markers appears.

NARRATOR

Giving you a head start on your
edit before you've shot a single
frame.

CUT TO:

INT. STUDIO - DAY

NARRATOR

(serious, principle-driven)

When we started this project, we
had three core principles from the
beginning:

ON-SCREEN TEXT

Md2Script-Script

Text overlays appearing in sequence:

"Number one: Simplicity over complexity."

"Number two: Clarity over cleverness."

"Number three: Maintainability over optimization."

The CLAUDE.md file appears in the editor showing these principles.

NARRATOR

These weren't just nice-to-have
guidelines—they were hard
requirements documented in our
codebase.

Code showing clean, simple function structures appears.

NARRATOR

And Claude Code helped us enforce
them at every step.

CUT TO:

INT. DIGITAL WORKSPACE - DAY

NARRATOR

(conversational)

Here's how the collaboration
worked. Instead of writing code
from scratch, I would describe the
feature I wanted—

ON-SCREEN

Chat conversation example appears showing a user request.

NARRATOR

"I need to parse scene headings
from markdown that start with three
hash marks."

NARRATOR

Claude Code would analyze the
existing codebase, understand our
architectural patterns, and suggest
an implementation that fit our
style.

SPLIT SCREEN

Claude Code on the left, code editor on the right, code
being generated in real-time.

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NARRATOR

But here's the key: it wasn't just generating code. It was having a conversation about design decisions.

ON-SCREEN

Key questions appear as text overlays:

"Should we use regex or a state machine for parsing?"

"How do we handle edge cases like nested parentheses in dialogue?"

"What's the right abstraction for rendering engines?"

Code review session showing different approaches appears.

NARRATOR

(impressed)

This iterative design conversation is where the real magic happened. Not just code generation—actual architectural thinking.

CUT TO:

INT. STUDIO - DAY

NARRATOR

We required 80% code coverage for all new features.

Test coverage report showing 82% coverage displays.

NARRATOR

Claude Code didn't just write the implementation—it wrote the tests alongside it.

SPLIT SCREEN

Implementation code on left, test code on right, displayed side by side.

NARRATOR

When we added vector PDF rendering using ReportLab, Claude generated:

ON-SCREEN

Checklist appearing item by item:

- Unit tests for font loading
- Integration tests for the full pipeline
- Edge case handling for missing bold fonts

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Pytest output showing all tests passing appears.

NARRATOR

Every commit followed the
conventional commits specification.

Git commit history with feat:, fix:, refactor: prefixes
displays.

NARRATOR

feat, fix, refactor. This meant our
changelog was automatically
generated and our version bumps
were semantically correct.

CUT TO:

INT. DIGITAL WORKSPACE - DAY

NARRATOR

As we added features like user
sessions and conversion history,
the database schema evolved.

Database schema diagram animates, showing changes over time.

NARRATOR

But we never made manual schema
changes. Every change went through
proper migrations.

Migration files appear in file explorer.

NARRATOR

And we kept our database.dbml file
up to date as the single source of
truth.

ON-SCREEN

DBML file excerpt showing table definitions appears.

NARRATOR

Claude Code would update the schema
documentation at the same time it
generated migration scripts. No
drift, no confusion, no "wait, what
version is production running?"

CUT TO:

INT. STUDIO - DAY

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NARRATOR

(technical but accessible)

One of the trickiest challenges was rendering. We needed two engines:

Code walkthrough of rendering modules appears.

NARRATOR

Vector rendering—using ReportLab for crisp, selectable text that looks razor-sharp at any zoom level.

CLOSE ON

Vector PDF zoomed in showing perfect text clarity.

NARRATOR

Raster rendering—using Pillow as a fallback with zero external dependencies beyond the Python standard library.

Raster PDF at same zoom level appears.

NARRATOR

The vector output is objectively better—smaller file size, searchable text, perfect fonts.

ON-SCREEN

Comparison stats showing file sizes and quality metrics.

NARRATOR

But the raster version just works even on systems without ReportLab installed.

Terminal shows successful PDF generation without ReportLab.

CUT TO:

INT. STUDIO - CONTINUOUS

NARRATOR

(detail-oriented)

Here's a detail most people wouldn't notice: bold scene headings.

CLOSE ON

PDF showing bold scene headings in detail.

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NARRATOR

The tool attempts to auto-detect a bold variant of your monospace font by pattern-matching filenames.

ON-SCREEN

Font detection logic appears:

DejaVuSansMono-Regular.ttf → DejaVuSansMono-Bold.ttf

NARRATOR

If it can't find one? It simulates bold by drawing the text twice with a tiny horizontal offset.

Before and after comparison showing simulated bold effect.

NARRATOR

(appreciative)

Clever, right? This is the kind of thoughtful detail that emerged from iterating with Claude Code. It suggested the fallback approach when we were stuck on font variants.

CUT TO:

INT. DIGITAL WORKSPACE - DAY

NARRATOR

We didn't stop at the CLI. We built a FastAPI web application with drag-and-drop upload and a live markdown editor.

Web interface demo shows file being dragged, live preview updating.

NARRATOR

The entire stack runs in Docker containers deployed to a Raspberry Pi—yes, a Raspberry Pi—

Physical Raspberry Pi with network cables appears on screen.

NARRATOR

—using our local container registry.

Md2Script-Script

NARRATOR

(security-focused)

Security features built in from day one:

ON-SCREEN

Security checklist appearing:

- File type validation (markdown only)
- 1MB upload limit
- Rate limiting (5 requests per minute)
- No file storage—everything processed in-memory

GitHub Actions workflow visualization appears.

NARRATOR

Our CI/CD pipeline runs tests on every commit, builds multi-platform Docker images for ARM and x86, and pushes to our registry—all automated through GitHub Actions.

CUT TO:

INT. STUDIO - DAY

NARRATOR

(reflective, wisdom-sharing)

Building ScriptMD2PDF with Claude Code taught us three major lessons about AI-assisted development:

Montage of development highlights: code, tests, deployments.

NARRATOR

Number one: AI is not a replacement for architectural thinking.

ON-SCREEN TEXT

"AI amplifies, doesn't replace"

NARRATOR

We still made the big decisions about rendering engines, data structures, and API design. But Claude Code accelerated implementation by 3-4x.

NARRATOR

Number two: Documentation and conventions multiply AI effectiveness.

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CLAUDE.md, conventional commits, and DBML files appear.

NARRATOR

Our principles, conventional
commits, and schema documentation
meant Claude always knew what good
code looked like for our project.

NARRATOR

Number three: Test-driven
development works beautifully with
AI assistance.

Test suite with 100+ tests passing displays.

NARRATOR

When you require tests for
everything, the AI writes more
robust code because it's thinking
about edge cases from the start.

CUT TO:

INT. DIGITAL WORKSPACE - DAY

NARRATOR

(amazed)

Here's what still amazes me: we
built a tool that handles
screenplay parsing, vector PDF
rendering, entity extraction,
FCPXML timeline generation, web
APIs, Docker deployment, and CI/CD
automation...

Quick cuts showing each feature in action.

NARRATOR

...in a codebase that's clean,
well-tested, and maintainable.

Code metrics display: test coverage, lines of code,
complexity scores.

NARRATOR

(conviction)

That's the promise of AI-assisted
development when you do it
thoughtfully.

CUT TO:

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NARRATOR

(inviting)

ScriptMD2PDF is free and open
source on GitHub.

ON-SCREEN

GitHub URL appears: github.com/kevinmcaleer/scriptmd2pdf

NARRATOR

You can use the CLI tool locally,
or try the web interface at
md2script.kevs.wtf.

Quick demo of both CLI and web interface.

NARRATOR

If you're interested in AI-assisted
development, building automation
tools, or just want to see clean
Python architecture in action—check
out the repo.

ANIMATION

Subscribe button animation with bell icon appears.

NARRATOR

And if you found this valuable,
subscribe for more deep dives into
development tools, AI workflows,
and building things that actually
work in production.

CUT TO:

INT. STUDIO - DAY

NARRATOR

(inspirational)

The future of software development
isn't AI replacing developers.

SPLIT SCREEN

Developer with Claude Code working together.

NARRATOR

It's AI amplifying what good
developers can build.

FINAL DEMO

Markdown transforming to beautiful PDF on screen.

Md2Script-Script

NARRATOR

We just proved it with
ScriptMD2PDF.

NARRATOR

(direct)

Thanks for watching. Now go build
something.

END SCREEN

Links to GitHub repo, web interface, and next video appear.

FADE OUT.: