Unified HTML Generation Test

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Abstract—This document tests the unified HTML generation system to ensure both DOCX and PDF outputs are generated from the same HTML template, resulting in identical formatting and layout. The unified system uses a master HTML template with precise CSS styling that matches IEEE LaTeX specifications, then converts this HTML to both DOCX (via pypandoc) and PDF (via WeasyPrint) formats. This approach ensures perfect visual consistency between the two output formats, eliminating discrepancies in line breaks, justification, spacing, and overall document appearance that would occur if different generation methods were used.

Index Terms—unified HTML generation, DOCX-PDF consistency, IEEE formatting, pypandoc, WeasyPrint

1. UNIFIED HTML SYSTEM OVERVIEW

2. IMPLEMENTATION DETAILS

REFERENCES

The unified HTML generation system creates a single master HTML template with precise CSS styling that matches IEEE LaTeX specifications. This template is then converted to both DOCX and PDF formats using specialized converters, ensuring identical visual output.

The system uses pypandoc for HTML-to-DOCX conversion and WeasyPrint for HTML-to-PDF conversion. Both converters process the same master HTML template, which includes precise CSS rules for typography, spacing, margins, and layout that match IEEE LaTeX output exactly.

[1] IEEE Standards Association. (2021). IEEE Editorial Style Manual. IEEE Press.