gropdf.zig Test

by

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Introduction and Motivation

This file contains only some paragraphs of text. Its purpose is to showcase some of groff's features und highlight potential rendering problems in my custom PDF backend, gropdf.zig.

Current State

Currently, a lot of features are implemented: We clearly can typeset characters, sentences and whole paragraphs. In addition, headings are working, some glitches have been solved by me. Even Drop Caps are working, and if you look closely, you will notice the page number at the bottom.

The positioning in grout is an interessting topic, as it seems to be absolute, at first glance. Meaning, there are H and V absolute coordinates given through all of the document.

But, when ligatures are to be rendered, C commands are issued and these do not increment the internal drawing position of the backend device. The same is true for wh commands, which increment the x drawing position in a relative way. But in order to be able to compute the new absolute position, we need to know the current position.

PDF on the other hand has a text rendering command Tj,

which increases the drawing position automatically, but we have no way to query the current position as that is an internal state of the renderer, which lives in the viewer.

There was no way around implementing relative positioning in gropdf.zig. That meant, we need to read the font description files residing in /usr/share/groff/current/font/devpdf/<font name>