Assignment 4 - Accessibility

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Like many faculty members in the Mathematics and Statistics Department, I make PDF's using the markup language LaTeX. It is the gold standard for rendering beautiful mathematics, and I've used it for most projects for the last 10 years. I've invested hundreds of hours becoming proficient with it.

In STAT 50, I used LaTeXfor worksheets, quizzes, and exams, which is essentially all my content other than handwritten notes. An example is avilable here: https://github.com/clarkfitzg/stat50/blob/master/counting_worksheet.pdf Every single document was red on Canvas' Accessibility Checker, which means they are not at all accessible.

Making complex equations and mathematical notation accessible to a low vision user seems like a difficult problem, and I don't know how to solve it. None of the instructional materials address this problem, which is core to our department, and STEM more generally. I'd love to hear of a solution.

Plan

For my fall courses I plan to switch from LaTeXto markdown and Canvas. The formatting of any PDF's won't be as elegant, but on the plus side markdown is easier for me, and I can generate HTML that will be slightly more accessible.

I'm all about the open educational resources, which is why I generally only use open source software in my courses. I plan to make all my content for STAT 128 available on a public website. Maybe I'll do it for STAT 50 as well, depending on how long it takes.