MAIS202 Project deliverable

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Project Proposal:

Not everyone is given the same ability in life, however we should all possess the opportunity to learn. However, this is much more difficult for students with disabilities. Every year, many students are asked to share their notes with the Office of Students with Disabilities. However, I believe that there is a more efficient solution to this problem. That is why, for my final project for MAIS 202, I would like to create a picture to LaTeXcode application.

For the moment, I have found a dataset on Kaggle that is fairly interesting , which link will be written below. It includes all math operators, as well as basic Greek Alphabet which are saved in 45x45 pixel .jpg files. I understand that this dataset alone will not be sufficient for the program I will write, but maybe it would be useful to implement some online APIs, although that will require us to go through image file twice.

I have found some Optical Character Verification softwares, but none of the ones I found seemed to work well, hence a problem I could possibly encounter during the process of preprocessing my data would be that the it would be preferable to separate the characters from one another to obtain greater accuracy.

Another problem I could see happening is that it would be fairly impossible to create environment, unless I match specific keywords after I obtain my specific keywords such as *definition, theorem, example, lemma*, etc.

https://www.kaggle.com/xainano/handwrittenmathsymbols