

ECOTE - preliminary project

Translator of a LaTeX subset to HTML

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1 General overview and assumptions

initial task proposals (at least: assumptions, variant selection, implementation technology, scope, etc.).

My task is to create a translator of \LaTeX subset to selected text format with focus on \LaTeX tables

I decided to change to translator of \LaTeX subset to HTML since I know \LaTeX very well and HTML relatively well, I decide to translate \LaTeX into HTML since HTML is easy, a little bit different than \LaTeX and popular which makes this translator a practical tool.

1.1 Assumptions

- No \LaTeX (%) comments in the script
- There are no extra packages in \LaTeX script (provided with \usepackage keyword) besides ones distributed with \LaTeX
- There are no extra classes in \LaTeX script besides ones distributed with \LaTeX
- There is nothing between \documentclass keyword and $\text{\begin{document}}$ keyword
- No standard \LaTeX instructions are modified in the script

- "Tables" will be represented using \LaTeX *table* environment

2 Functional requirements

2.1 \LaTeX subset

This project will focus almost exclusively on *table* environment more specifically table environment containing tabular inside of it

3 Implementation

I decided to use Python as a language in which I will implement my solution The reasons for using python are as follow:

1. It is the easiest language among those that I know
2. I know it enough to be confident in my ability to implement this solution in python
3. I want to learn python more through this project

Negative aspects of python which is that it is very slow language do not bother me as I believe the project scope will not be big enough for this to become an issue

3.1 General architecture

3.2 Data structures

3.3 Module descriptions

3.4 Input/output description

3.5 Others

4 Functional test cases