Taylor Hannan

CS 2353

## Truth Table Maker

For my project, I made a program that generates a truth table for a given logical formula. The main language I used to code this project was Python and I made use of the Flask library along with HTML and CSS to make the user interface. Flask is a Python library that acts as a framework for a website and is an easy way for Python and HTML to interact with each other. The user can enter a logical formula into a text box and the program will parse the formula, assign truth values to each element, and make a truth table for the formula.

This project relates to the logical aspect of this course. Throughout the semester, logic played a key role in the work we were doing and truth tables were used frequently to help determine the truth values of a logical formula as well as the validity of a particular argument. I chose this idea for my project because I wanted to make something that not only demonstrated a concept of the course but also would be something that I would actually use in the future. There could very well be a time someday where I need to make a truth table for a formula and this program could come in handy for doing that. A lot of the other ideas that I had for this project were very specific to the course and I probably would never use the program I would have written for those ideas again after I clicked submit. I chose to write the program in Python because I haven't had the chance to write Python code for an SMU project yet and it's my favorite language to program with. I also have past experience using Flask to build websites and I thought it would be fun and more user friendly to make a GUI for the program rather than just running it in the terminal.