COT is a sophisticated plagiarism checker that is designed to be both fast and accurate. When a user submits an input file (in either .txt or .docx format) or enters text directly into the input textbox, COT begins by extracting the title from the input file using sent\_tokenize.

Once the title has been extracted, COT sends it as a prompt to ChatGPT, a state-of-the-art language model developed by OpenAI. ChatGPT generates 10 different responses based on the given prompt, which are then used to generate files that will be compared to the input file for potential instances of plagiarism.

To determine whether or not the input file contains instances of plagiarism, COT uses cosine similarity tf-idf factorization to compare the input file to the files generated by ChatGPT. This involves breaking down the text in each file into individual words or phrases, then comparing the frequency of these words or phrases across both files. The closer the scores are, the more similar the two files are considered to be.

Once COT has identified the file generated by ChatGPT that is most similar to the input file, it highlights the matching text in the input file. This makes it easy for users to see where instances of potential plagiarism may exist in their work.

Finally, COT calculates the plagiarism percentage based on the amount of matching text found in the input file, and displays the result as a pie chart. Users can also click on a button to view the highlighted text directly within the COT interface, making it easy to see exactly where potential instances of plagiarism may exist.

Overall, COT is a powerful and effective tool for detecting potential instances of plagiarism in text-based files. Its use of advanced algorithms and machine learning techniques, combined with its user-friendly interface, make it a valuable resource for anyone concerned about maintaining academic and professional integrity in their work.