



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

SECP 1513 - 04
TECHNOLOGY AND INFORMATION SYSTEM

PLAGIARISM DETECTION

PROJECT PROPOSAL

Team - FantasTech

Name	Matric No
Esha Shubherthee	A22EC4030
Aqilla Noorshaumy	A22EC4028
Nouredin Mamdouh Mohamed Eldesouky Elnamla	A23CS0020
Someyo Kamal Utsho	A22EC9007
Kak You An	A23CS5002
SHAMS AHMED	A22EC4041
ALBATOUL WALEED	A22EC4026
Asilah binti Mohd Razak	A23CS0051

Plagiarism Detection

Client Background

Dr. Alif Ridzuan Khairuddin is a Programming Technique lecturer with a Ph.D. in Computer Science. His research interests are AI, Machine Learning, and Data Analytics, aligning with his areas of expertise. Dr. Alif is quite a new lecturer, teaching at UTM for only one year. However, Dr. Alif occasionally encounters plagiarism-related issues in his academic activities.

Existing Tool

Dr. Alif uses Turnitin as a plagiarism detection tool. Turnitin, widely used in education, compares submitted assignments against a database, aiming to identify plagiarism and provide instructors with a similarity report. However, while Dr. Alif believes Turnitin to be a good tool to detect plagiarism, he believes that it isn't the best and there is room for many adjustments.

Problem with Existing Tool

Problems that Dr. Alif believes exist in Turnitin and more:

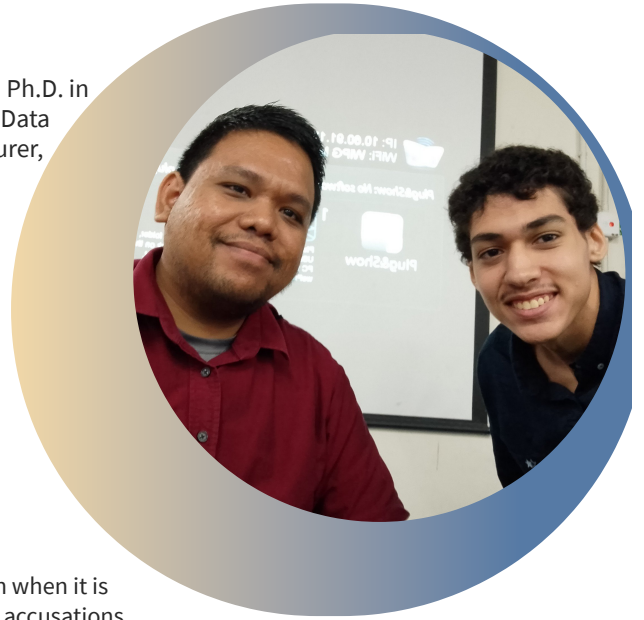
- **False Flagging:** Turnitin may flag some text as potentially plagiarized even when it is properly cited or consists of commonly used phrases. This can lead to false accusations.
- **Limited Understanding of Context:** Turnitin focuses on text matching, but it may not fully understand the context of the passage. It does not differentiate between legitimate paraphrasing and plagiarism.
- **Inability to Detect Contract Cheating:** Turnitin may not effectively detect instances of contract cheating, where students pay others to complete their assignments.
- **Subscription Costs:** Turnitin has quite expensive subscription costs which may limit certain organizations and people from using it.
- **Language:** The database is more directed to English-language content and may not be as effective in detecting plagiarism in assignments written in different languages.

Proposed Idea/Solutions to Overcome the Problems:

- **Refinement of Matching Algorithms:** Improving the system's ability to recognize proper paraphrasing and common phrases by giving it various examples in the database.
- **Contextual Analysis:** Enhance the system's ability to understand the context and intent of the text.
- **Contract Cheating Detection:** Create a database where the students would upload their work. Then the AI will memorize their writing style and suspect when there is a change.
- **Cost Reduction:** Reducing the costs to be suitable for almost everyone or making the site free and gaining profit from advertisements.
- **Languages Compatibility:** Expand the database to include a more diverse range of languages.

Benefits of Proposed Solutions

- **Accurate Paraphrasing Recognition:** Improved algorithms ensure precise plagiarism detection without unnecessary flags.
- **Contextual Understanding:** Enhanced analysis distinguishes between legitimate paraphrasing and plagiarism more effectively.
- **Contract Cheating Detection:** AI memorization strengthens the tool's ability to detect contract cheating for better academic integrity.
- **Accessible Plagiarism Detection:** Reduced costs or a free version with advertisements ensures wider access to the tool.
- **Global Languages:** Expanded language database promotes inclusivity and improves effectiveness worldwide.



Client Dr. Alif Ridzuan