**MIT School of Engineering**

**Department of Computer Science and Engineering**

### Mini Project Synopsis

**Group ID: 05**

**Project Title: Xboard : A secure keyboard.**

**Group Members:**

| **Enrolment Number** | **Roll No.** | **Name of student** | **Email Id** | **Contact Number** |
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**Problem statement.**

Plagiarism can be defined as to steal and pass off (the ideas or words of another) as one's own, to use (another's production) without crediting the source, to commit literary theft or to present as new and original an idea or product derived from an existing source . Unchecked plagiarism leads to the deterioration of creativity, innovation and the quality of education, and promotes theft of ideas and original work. Various projects undertaken by students each semester help students gain necessary skills and experience in software development. This enables students to be employed by the industry upon graduation and create industry ready software developers. However, plagiarism of ideas and code undermines the goal of working on projects.

**Abstract.**

Project plagiarism (ideas or code) is a problem that is prevalent amongst students. The project aims to ascertain and implement the best method for plagiarism detection. This was found to SVDplag method. Using this method the project aims to prevent plagiarism in student projects.

**Literature survey.**

various similarity metrics are used for the purposes of plagiarism detection such as the **Jaccard similarity** and **cosine similarity** metrics. Prior to using the similarity metrics, the corpus must be pre-processed. Applying techniques such as stop-word removal and lemmatization to the text improve the accuracy and efficiency of the detector **[1].** **The cosine similarity** metric is well suited to plagiarism detection applications **[2]**.However, **the vector space model (VSM),** is only considered as a baseline in the field of plagiarism detection. a new plagiarism detection method based on **SVD (singular value decomposition)** solves associations among phrases contained in the examined documents to infer the mutual similarity of all pairs of the documents. This method called **SVDplag** overcomes other methods**[3].**

**Mathematical models.**

**Conclusion.**

The proposed SVDplag method is shown to be superior to other methods of plagiarism detection and we have implemented it to be used for the purposes of tracking plagiarised projects.

**References:**

[1] Roshan G. Ragel., “Plagiarism Detection on Electronic Text based  
Assignments using Vector Space Model,”.  
[2]. Shanmugasundaram Hariharan., “Automatic Plagiarism Detection Using Similarity  
Analysis,” *in The International Arab Journal of Information Technology, Vol. 9, No. 4, July,  
pp. 322-326, 2012*.

[3] Ceska, Zdenek. (2008). Plagiarism Detection Based on Singular Value Decomposition.