## **OVERVIEW**

Design, develop, test and implement an application to facilitate the instructors to detect plagiarism among students submitting assignment. The submitted assignments is compared based on textual similarities, moving similar functions or methods to another location in the same file, renaming variables, classes, and methods, extracting sequences of statements into methods, etc.

## **PLAN**

Week	To Do
Week 1 Planning	Create an outline plan for the entire project     Decide the programming language to detect for plagiarism     Create a mockup UI
Week 2 Environment Setup and Research	<ol> <li>Research on the algorithms that may be implemented for detecting plagiarism</li> <li>Research on the various libraries that may be used to parse the file</li> <li>Decide the technologies to implement</li> <li>Setup local environment (Java, Database)</li> </ol>
Week 3 & 4 UML Design and Interfaces	Design the UML class diagrams     Decide and define the interfaces to implement
Week 5 & 6 Backend and Frontend Implementation	<ol> <li>Add JUnit test cases</li> <li>Implement parser library</li> <li>Implement a plagiarism detection algorithm</li> <li>Complete necessary backend methods</li> <li>Implement basic frontend features</li> </ol>
Week 7 Testing and delivery of the prototype	Test JUnit test cases and fix bugs     Test the prototype and fix bugs     Deploy the prototype and deliver
Week 8 & 9 Backend and Frontend enhancement	Optimize algorithm, methods, features of the system     Enhance the UI
Week 10 Testing and final delivery of product	Perform tests and fix bugs     Deploy and deliver the project     Present the project to professor and TAs

Targeted programming language: C