STATEMENT

Objective

Develop an application to detect plagiarism in student submissions of programming assignments by using various methods. The system should detect syntactic similarities and behavior-preserving transformations like splitting code into methods, renaming variables, etc. The application should detect similarities in programs written in **Java**.

Plan

Week	Plan
Week 1 **Development Environment**	1. Setup dev systems and establish process. 2. Setup Jenkins. 3. Setup basic web REST (Jersey) endpoint. 4. Setup DB and storage system. 5. Database design and analysis.
Week 2 **Backend Logic**	1. Implement Backend logic engine with basic functionality: a. Changes in syntax b. AST 2. Setup basic user authentication system.
Week 3 **First increment Delivery** ***Deliverables:*** *Working product with AST and basic diff for 2 files.* *Working Web UI*	1. UI development 2. Integration
Week 4 **Logic Enhancement**	1. Functionality Enhancement 2. Winnowing or n-grams 3. ML Techniques
Week 5 **Fine tuning**	1. Finalize the logic and functionality 2. Develop endpoints for new data
Week 6 **Second (Final) Increment Delivery**	1. UI enhancement with new features 2. Final Integration
Week 7 **Final Presentations**	

References: https://theory.stanford.edu/~aiken/publications/papers/sigmod03.pdf