Smart UML - Assignment Management Tool forUML Diagrams

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Abstract

Nowadays the majority of comprehensive manual processes have been automated. Nonetheless, there is no reliable approach for evaluating the Unified Modeling Language (UML) diagrams for plagiarism and veracity. The UML Diagrams are typically used to graphically represent a static and dynamic view of component interactions pertaining to the software engineering domain to get the insight view of a particular system. UML diagrams are widely used by software engineering industry experts as well as apprentices. The Class diagram and the use case diagrams are the mostly used diagrams in UML. During the stage of assessment in UML modelling, diagrams, the accomplishment of plagiarism is a crucial factor to be achieved in most exams due to the nature of diagrammatical notation and tedious task to perform. The proposed system automates capturing details in UML diagram components and generate a model answer from the given question scenario by comparing the provided diagrams while calculating the plagiarism percentage with the correction percentage.

Keywords

E-Learning, Unified Modelling Language (UML), Natural Language Processing (NLP), UML Generation, Fast R-CNN