Class diagram critic: a design critic tool for UML class diagram

ABSTRACT

Unified Modeling Language (UML) diagrams are widely used in Computer Science courses. The UML Class Diagram is part of the most important and widely used diagrams in teaching UML. The learning of UML Class Diagram demands a sufficient guidance from the lecturers. Thus, a critic-based and collaborative approach was proposed in the design of the Class Diagram Critic (CDC) tool. The CDC is an educational tool that offers quick and meaningful feedback to students about UML class diagrams they design. Critics in CDC tool are mainly to critique errors in UML class diagrams, offer suggestions, and provide semi-automated design improvements to students. The CDC tool employed the collaborative approach as to support the collaborative learning between students and lecturers.

Keyword: Class diagram critic; Critic-based approach; Design critic; UML class diagram