Design and Implementation of Extended Iconic Stereotypes for GNSS Application in the UML Class Diagram

Wang Bo, Gang-Suk Na, Cheol-Jung Yoo, Ok-Bae Chang, Min-Soo Kim

Software Engineering Laboratory, Dept. of Computer Science, Chonbuk National University, Jeonju, Jeonbuk 561-756, Korea

4S Integration Technology Research Team, Computer & Software Research Laboratory, Electronics and Telecommunications Research Institute, 161 Gajeong-Dong, Yuseong-GU, Daejeon, 305-350, Korea

Phone: +82-63-270-3613 Fax: +82-63-270-3403

E-mail: wanglucky@empal.com, gsna@cs.chonbuk.ac.kr, {cjyoo, okjang}@moak.chonbuk.ac.kr

Currently there are numerous papers in which many new kinds of customizing stereotypes by UML extension mechanism for different application environments such as real-time system, Geographic Information System (GIS) and so on are proposed. However, these stereotypes that represent different type model elements such as class, association, generalization and so on have not yet been seen in one of the most popular visual modeling tool for software development, Rational Rose.

Therefore, in this paper, a design of extended iconic stereotype for GNSS application in the UML class diagram and its implementation as a tool of StereotypeCreator for Rational Rose will be presented.