Abstract

Due to the rapid use of various applications, the information is collected from these applications are vague and improper but the crisp information is an important part of any object-oriented database in the current scenario. As an uncertainty or vagueness in any database is represented through the fuzzy techniques, an object-oriented database is very efficient in handling that kind of fuzziness and complex database model. Therefore, the limited research work has done to designing and representing a fuzzy object-oriented database through UML, for that purpose, a domain of hospital has been taken for diagnosis the patient for various diseases with their uncertain input values (disease sign, symptoms, and pathology test result values). This will enhance the functioning of the developed software design on the present approach. A UML class & Sequence diagram are also designed for representing the complete process of registration and diagnosis of patients and design the fuzzy object-oriented database i.e. FOOD through the SQL server 2008.

**Index Terms**

Computer Science  Fuzzy Systems
Keywords

UML, Object-Oriented Database, Fuzzy Object-Oriented Database (FOOD), Class Diagram and Sequence Diagram.