ABSTRACT

The method of object-oriented requirements analysis for HCI has a visionary function in information systems development. Especially, if method is integrated with system analysis and design methods, it would be conducive to designing information systems to meet user requirements very well. Although object-oriented requirements analysis methods proliferate in the literature, the investigation of how to integrate object-oriented requirements analysis methods with HCI in the environment of direct manipulation is still rare. The present research attempts to propose a method of requirements analysis for HCI in the environment of direct manipulation, built on the base of object-orientation and unified modeling language (UML). The proposed method divides the analysis the system into four stages, viz. identification of user’s expectations about the system, search of domain objects, discovery of the relationships between domain objects and integrated domain analysis. A case study on a fault tree drawing system has been conducted to illustrate how the proposed method works in reality. Experience tells that the proposed method facilitates the acquisition of user requirements and the transition from analysis to design for this type of application domain.

Keywords: 物件導向 ; 需求分析 ; 直接操作 ; 人機介面