

4037714 EGT/M : MAJOR: TECHNOLOGY OF INFORMATION SYSTEM

MANAGEMENT; M.Sc. (TECHNOLOGY OF INFORMATION
SYSTEM MANAGEMENT)

KEY WORDS : FORMAL SPECIFICATION USING VDM / LIBRARY

ADISAK SANGSONGFA: DEVELOPMENT OF THE TOOLS TO
DEFINE FORMAL SPECIFICATION OF REQUIREMENTS USING VDM IN A
CASE STUDY OF BORROWING AND RETURNING BOOKS IN LIBRARIES
SYSTEM. THESIS ADVISOR: THANAKORN UAN-ON, Dr,Engr., WANCHAI
RIVEPIBOON, Ph.D., KASEM KULPRADIT, M.Sc., CHOMCHOK
NAMSRIKULRAT, M.Eng. 109 p ISBN 974-663-619-7

The research is conducted in order to development the tools to define the formal specification of requirements using by VDM. This is a case study of borrowing and returning the books in the library system. The research includes the requirements of borrowing and returning books in the library system and structure in the VDM. In conducting the research, the researcher can develop the tools to help the software engineer use formal specifications using VDM very easily. The tool analysis and designs are presented in an object - oriented. In designing the tools, the researcher uses the Graphic User Interface (GUI) for user interface design. The database design uses the MS Access 97. The specifications are recommended for standalone hardware and MS Windows 95 operation. The findings are illustrated in three parts. The first part involves the answer requirement. The second part involves method to translate from the function requirement into the predicated calculus and the third part involves the method to translate from the predicated calculus into the VDM.