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KEY WORD: : FRONT-END / DATA RETRIEVAL / NATURAL LANGUAGE PROCESSING
KREANGSAK ASAVARATANA : DATA RETRIEVAL VIA THE FRONT-END USING
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The purpose of this thesis is to illustrate and build a front-end system for relational database retrieval using Thai sentences. Thai sentence, process by the system, will be translated to SQL command for data retrieval. The front-end system is composed of 3 parts. (1) Parser, using LR-parsing technique to parse CFG, HPSG for sentence parsing, and representing feature structure as directed acyclic graph. (2) Semantic interpreter, using knowledge-base in frame work of feature structure to interpret and unification operator to constitute structure. (3) Query generator, integrating of information of the structure and then generating a SQL command. The system, implemented by C and C++, runs on a micro-computer under Microsoft Windows Operating System. The result, demonstrated with a sample library database, is able to use Thai sentences for database retrieval.

ภาควิชา..... วิศวกรรมคอมพิวเตอร์..... ลายมือชื่อนิสิต..... *ก้องเกียรติ อภิรักษ์*
สาขาวิชา..... วิศวกรรมคอมพิวเตอร์..... ลายมือชื่ออาจารย์ที่ปรึกษา..... *[Signature]*
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