UNIVERSITI TEKNOLOGI MARA

AN ONTOLOGICAL MODEL TO PRESERVE INDIGENOUS KNOWLEDGE OF MALAY CONFINEMENT DIETARY

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Report submitted in partial fulfillment of the requirements for the degree of

Master of Science (Information Technology)

Faculty of Computer and Mathematical Sciences

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STUDENT DECLARATION

I declare that the work in this report was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledged as reference work. This report has not been submitted to any other academic institution on non-academic institution for any other degree of qualification.

In the event that my report is found to violate the conditions mentioned above, I voluntarily waive the right of conferment of my degree and degree to be subjected to the disciplinary rules and regulations of Universiti Teknologi MARA.

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Project Title	An Ontological Model for Indigenous Knowledge of Malay Confinement Dietary
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Date	11/7/2013

Faculty Computer and Mathematical Sciences

MSc IT DISSERTATION REPORT (SYS799)
SEMESTER SEPT 2012 – JAN 2013

CONFIRMATION OF CORRECTIONS

I, **Prof. Dr. Nor Laila Md Noor**, hereby confirm that **Muhammad Hamiz Bin Mohd Radzi** has made amendments to his dissertation report as requested and am satisfied with the amendments.

I am pleased to say that the student may now submit his/her hard-bound dissertation on **31st July 2013.**

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Faculty Computer and Mathematical Sciences

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ABSTRACT

Science and technology are intimately linked to the studies and expansion in the general progression of the society. However, Indigenous Knowledge (IK) which holds the same weight-age as the development of the society with science seems to be forgotten and it leads to its extinction. IK is a tacit, scattered and unorganized knowledge that being used by the people in certain environments in making their living such as health, spiritual and agriculture. Hence, this research intends to gather, structure and model Malay indigenous health knowledge with scope focuses on the Malay confinement dietary. This qualitative interpretive research is using a sampling of the purposive method in order to gather the data through the interviews with Malay traditional midwives, gynaecologist and dietician. Then, the conceptual analysis is used to structure the unorganized data from the interviews. The ontological model is then developed and it is divided into five main classes which are the food, food pyramid, restriction, nutrient deficiency, and reason. The classes will be linked to each other through object properties of isEnhance, hasReason, hasRestriction and hasLevel. The prototype of web semantic representation is finally developed in Eclipse by using J2EE library integrated with Jena framework. For ontology validation, Application-Based Evaluation is used to evaluate the ontological model and the prototype by checking the correctness of the information retrieved. This research contributes on modelling Malay confinement dietary into ontological model and represented it into web semantic system besides discovering the relationship indirectly between the scientific towards practicing of Malay confinement dietary.