

IBANAG CULTURAL BELIEFS AND PRACTICES KNOWLEDGE BASE SYSTEM: BASIS FOR THE DEVELOPMENT OF WEB AND MOBILE TRANSLATION LANGUAGE

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Abstract - The study Ibanag Cultural Beliefs and Practices Knowledge Based System: Basis for the Development of Web and Mobile Translation Language focused on three main points: the gathering of information about the different Ibanag cultural beliefs and practices: the development of web and mobile translation language: the evaluation of the developed web and mobile translation language. In this study, Hiyang Approach and Pamamaraan were used to gather information on the present Ibanag cultural beliefs and practices. The information that was gathered about the different cultural information of Ibanag was used as the basis for collecting and gathering Ibanag vocabulary. Also, Rapid Word Collection (RWC) and Dictionary Development Process (DDP) were the approaches and processes utilized in gathering of Ibanag vocabulary. The words or terms were translated into Tagalog and English and were submitted to the language expert's for validation. Ethnographic translation was the approaches and processes utilized by the languages experts' for translating the language. The cultural information of Ibanag and the validated word that was translated to other language were served as the data for the developed Web and Mobile translation. The development phase of the study included the web and mobile interface design for the repository tool of the different cultural beliefs and practices of Ibanag and for the translation of the Ibanag language to Tagalog and English with the corresponding picture and audio for each word/s or term/s. In the development of Web and mobile translation for Ibanag to Tagalog and English, Greinbach normal form (GNF) rule extraction algorithm was utilized. Then, the Inference Engine was the methods used to execute the source text / word and analyses the processes based on the rules. Inference Engine was also used determine which rule to look at next and search for the portion of a rule-based system. In the Knowledge Base (rule base), rules were on the form of IF-THEN-ELSE condition, which performs the action in the database and adds a new fact (text) to the database if the rule is true or valid. The outputs that generated from the these International Conference on Internet Technologies and Society (ICITS) methods were the translated word from Ibanag to Filipino and English with related words/phrases and auditory modality. The developed system can be accessed online through Web and mobile platform and the translation of Ibanag to Tagalog or English can also be accessed in mobile in an offline mode. Based from the evaluation results, the system satisfied its implied functions were usable, reliable and portable. Hence, it can be used as the repository tool for the cultural information and vocabulary words of Ibanag. This can also serves as a tool to revive and preserves the language and the different cultural beliefs and practices of Ibanags.

Keywords - Knowledge Based, Hiyang Approach, Translation, Inference Engine, cultural beliefs and practices
