DePicT Dementia CLASS: Medical Learning Assistant System*

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Abstract- DePicT CLASS[1] is a case-based learning assistant system to detect and predict disease using image classification and text information. The main objective of DePicT Dementia CLASS[2] is to develop DePicT CLASS concept by enrichment of cases with dementia learning materials (e.g. reference images and textbooks). Each case has a word association profile (DePicT Profile Matrix) of the main keywords which are defined based on the International Classification of Functioning, Disability, and Health framework of WHO (ICF codes)[3] and medical expressions extracted from the references of dementia and its related diseases. Therefore, DePicT Dementia CLASS used DePicT Profile Matrix of WHO-ICF codes and enabled caregivers and patients' relatives to find their learning materials and references which address the problems that they are looking for. This recommender system proposes a combination of references with the highest value of keyword association strength and collaborative recommendation based on ranked references by the user's feedback.

Keyword: CBR, dementia, DePicT CLASS, ICF, caregiving, DePicT Dementia CLASS

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[3] World Health Organization, International Classification of Functioning, Disability and Health (ICF) Geneva: World Health Organization; 2001