UNIVERSITI TEKNOLOGI MARA

REQUIREMENT ANALYSIS ON LANDMARK SYMBOLS FOR AUDIO-TACTILE MAPS: CASE FOR BLIND USERS

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ABSTRACT

Vision is one of the most powerful and crucial senses that people have. But, there are also some people who are less fortunate such as blind people who do not have the capability to use one of the five senses, which is a sight. The audio-tactile maps is introduced for the blind to assist them in navigating from one place to another. The problem encounter when the tactile map was cluttered with the braille dots and symbols. It causes difficulties for the blind people to distinguish between the symbols and dots on the maps. The objectives to be achieved in this project is, to identify tactile symbols to represent landmarks, to design the landmarks on audio-tactile maps and to evaluate the effectiveness of the tactile symbols in representing the landmarks for blind people User requirements analysis methodology has been used to achieve the objectives of this project and to acquire the perfect results throughout the development process. Experiments with participants on MAB centers were carried out where they should choose the best tactile symbol for a particular landmark around MAB area. A set of tactile symbols in representing the landmarks on the audio-tactile map is produced to be used on a Talking Tactile Tablet (T3). As for recommendations, the designing of tactile symbols to represent landmark can be expanded throughout another area and not focus only at MAB area.

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