

ES-NMS: an expert system for non- motorized transportation strategies towards EcoCampus in Universiti Malaysia Sabah (UMS)

Abstract

The advancement of technology has led to the introduction of Artificial Intelligence such as expert systems to be used in solving issues regarding to transportation. Expert system is a computer program that is able to perform problem solving tasks at the same level as a human expert. This will be useful as an alternative solution to tackle the inaccessibility and shortage of human experts in certain region of the world. The objective of this study is to develop an expert system to implement strategies for non-motorized transportation system within Universiti Malaysia Sabah. The bulk of the data is obtained through the use of questionnaire given to the human experts to provide the strategies for the non-motorized transportation system. Using the feedback given by the human experts, the expert system is developed by using Microsoft Visual Basic 2013. The developed system is then evaluated by the human experts to validate and verify the system to ensure that it is acceptable to be used by the end-user. The developed expert system is then available to be used by the university to improve its sustainable program, EcoCampus.