

Eğitim ve Öğretim Araştırmaları Dergisi Journal of Research in Education and Teaching Kasım 2016 Cilt: 5 Sayı: 4 Makale No: 18 ISSN: 2146-9199



## DIAGNOSTIC TREE MODEL WITH PYTHON

Arş. Gör. Nisa Yenikalaycı Ondokuz Mayıs Üniversitesi nisa.yenikalayci@omu.edu.tr

## Abstract

The goal of this study is to model diagnostic tree model which is one of alternative measurement and assessment means with the use of Python programming language on computer. In the purpose of generating data, a diagnostic tree model which was in the unit of "power and move" in 11rd grade's course book of secondary education physics was chosen as a sample. In the purpose of generating codes, Python 3.5.1 version was used. Regarding the accuracy of codes which are generated, a view of a specialist that he has got sufficient knowledge on programming languages was taken. A user who work the program will come of the starting point in processing correctly or incorrectly by the answer that he gives on the first expression. Block letter (T/F) or lower letter (t/f) can be entered for expressions as response. If the user enters an expression or character except from them, the warning "please, press on the button T or F\_!" will come on the screen. If the user enters an incorrect expression at the beginning as a response to the program, the running of program will stop. The point that the person gets from the starting point is important in terms of indicating on what an extent he/she perceives the subject. This study can be done by timing, the time that students have got to get correct answer in the practice can be considered. Students can be asked to form the structure belonging to the diagnostic tree on their own on the basis of data flow belonging to codes.

Keywords: Science, alternative measurement and assessment, diagnostic tree, Python.