

ABSTRACT

Information System Study Programme in Telkom University has several course that teach programming in java language, those courses are programming algorithm, data structure and advanced programming, and object oriented programming. Those courses are conducted to bring out reliable and competent java programmer as well as to train students' mindset. However , learning and teaching process in programming class still less interactive with the result that many students feel bored and lack of understanding about the course. This can be seen from the data that we got from programming algorithm practicum result and object oriented practicum result. Based on the data, we know that the average score of programming algorithm practicum is 75,28. To support those result, we conducted a survey to 179 information system students in Telkom university. The survey was carried out by giving questions which includes three aspects : recall of data, comprehension, and analytical skill. The result of the survey showed that 28% of the students got right answer in comprehension, 28% of the students got right answer in analytical skill and 44% of the students got right answer in recall of data.

The purpose of this final task is to create a new platform as the programming learning media for information system students in Telkom University by using heuristic learning. With this program, the students are required to do live coding in java programming language with the result that the students can understand about the course that being taught. Besides for the students, this platform also built for the lecturer to add new contents for the students. By using this platform, we expect the course comprehension of the students and the interaction between students and lecturer can be increased. This program is built by using python programming language and django as the framework and iterative incremental as the design and development model.

Keyword : Gamification, Heuristic Learning, Iterative and Incremental.