

ANDROID MOBILE LEARNING DEVELOPMENT WITH THE GAMIFICATION CONCEPT IN EDUCATION IN WEB PROGRAMMING MATERIALS

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ABSTRACT

This research is an R&D research that aims to develop Android-based mobile learning with the concept of gamification in education as a learning media in Web Programming courses for S1 students of the Informatics Engineering Education Study Program, Department of Electronics and Informatics Engineering Education, Yogyakarta State University.

This developmental research is on developing the Alessi & Trollip model. The development of learning media products is based on the RPS Web Programming. The product trial is carried out in 2 seconds, namely the alpha test and beta test. Alpha test was conducted by 3 experts consisting of 1 material expert and 2 media experts. While the beta test was conducted by 38 second semester students of Informatics Engineering Education Study Program. The instrument used in this study published instruments for product development and product valuation instruments.

Alpha test results by material experts and media experts obtained "Very Good" results. While the results obtained from the beta test obtained "Good" results. Improving media products that are developed are suitable for use in learning web programming courses. Effectiveness of media products developed based on the results of summative evaluations (test results of the pretest and posttest competencies). The results of paired sample t-test t test analysis showed that the media developed were effective in improving learning outcomes.

Kata Kunci: *gamification, web*