ABSTRACT

Sahid Surakarta University is a private higher education institution located at Jl. Adi Sucipto No.154, Jajar, Laweyan, Surakarta, Central Java. The new student entrance test system at Sahid Surakarta University is still very simple, in the entrance examination test new students admission in 2018 Sahid Surakarta University still uses google forms as a test medium. This study aims to design and implement a website-based new student entrance test system at Sahid Surakarta University. OOAD (Object Oriented Analysis and Design) system design methods, data collection methods used are observation, interviews, and literature studies. The software development procedure uses the waterfall model, the stages of development consist of stages of needs analysis, design stages, stages of code making, testing phases, and stages of implementation. The research respondents were 30 students of Informatics Engineering Sahid Surakarta University. The results of this study were obtained: (1) website-based new student admission test equipment with the question sequence randomization examination method, the latest and longest sequential sequence, with the ability of the system to report test results and analyze test results, (2) website-based new student entrance test on the functional aspects the function runs 100% with no errors in the aspects tested, on the aspect of testing the user with the method of distributing the survey the total value obtained is 84.6% with the conclusion that respondents strongly agree with the making of these systems and devices.

Keywords: Website based, new students, OOAD, Sahid Surakarta, and online examinations.

ABSTRACT

Sahid University Surakarta is a university which located in Jl. Adi Sucipto No.154, Jajar, Laweyan, Surakarta, Central Java. The Student Executive Board (BEM) is an intra-campus student organization and executive organization in university. In recording of voting election from BEM leader, it is conducted manually and has several weaknesses. This study aims to design and implement an e-voting application in the election of BEM leader at Sahid Surakarta University. System design method based on OOAD (Object Oriented Analysis and Design) while the data collection methods cover observation, interviews, and literature review. The software development procedure uses the waterfall model. The procedure of development consists of needs analysis, design, coding, testing, and implementation. Meanwhile, the research respondents were 30 students of Informatics Engineering at Sahid Surakarta University. The results of this study show that (1) e-voting application for the election of BEM leader at Sahid Surakarta University has the method of results report on the election, the details of the candidates and the candidate pair, open and close voting. Besides, there are features of the voter export, election period and voting results analyzing 2) the application of e-voting runs 100% with no errors in the functional aspects. Moreover, in the aspects of user testing with the survey method, the total value obtained an average of 3.35 with interpretation strongly agrees to the system and tools.

Keywords: **BEM, E-voting, OOAD, leader election, Sahid Surakarta University.**