DESIGN AND BUILD OF STUDENT ACADEMIC MONITORING INFORMATION SYSTEM (SIMSIS) SMAN 9 BALIKPAPAN USING EXTREME PROGRAMMING METHOD

By   : Rendy Setyawan
Student Identity Number   : 10171063
Supervisor   : Yuyun Tri Wiranti, S.Kom., M.MT
Co-Supervisor   : Sri Rahayu Natasia, S.Komp M.Si., M.Sc.,

ABSTRACT

Student academic monitoring activities are carried out by educational institutions both in universities and schools. The results of this monitoring activity will be reported by the teacher to the parents of students, the aim is to invite parents to participate in supervising students. So to facilitate the academic monitoring process, the Student Academic Monitoring Information System (SIMSIS) was developed at SMAN 9 Balikpapan. The purpose of the research to be achieved in this study is to develop a student academic monitoring information system that is in accordance with the needs of SMAN 9 Balikpapan, saves costs in the reporting process and helps facilitate the transparency process to parents. The development of the SIMSIS application applies the extreme programming (XP) model framework with the aim of developing software that demonstrates simplicity, ease of communication, based on feedback, courage, and mutual respect. The stages of XP itself consist of the exploration phase, which is the process of meeting with related parties who have projects to discuss application requirements. The planning phase is the planning stage for the development process, namely determining system boundaries, story points, and development timelines. Iterations to release phase is the application development stage which consists of analysis, design, coding, and testing. Productionizing phase is the stage of launching the application by doing deployment and User acceptance testing. This SIMSIS application has been completed and is in accordance with the requirements needed by SMAN 9 Balikpapan, and has answered the existing problems so that with this system the process becomes easier, as needed, and cost-effective. And the results have been user acceptance testing to ensure that the application is in accordance with the needs of SMAN 9 Balikpapan.

Keyword   : Extreme Programming, Information Systems, Monitoring, SIMSIS