

Abstract

The development in identification technology has been very rapidly growing. Currently there are RFID identification techniques (radio wave-based) which are used for identification of goods, animals, and humans. RFID technology is used in various areas of human life, one of the example is for education. Similar to other systems, RFID technology also has a system architecture. Telkom University applies RFID technology for student attendance system. In its application, there are some constraints on system quality attributes. It takes analysis and evaluation on the quality of the attributes in attendance system architecture, to make it better in future. This research uses Architecture Tradeoff Analysis Method (ATAM) method to evaluate the quality of attributes in the system architecture. This method uses the scenario of each quality attribute that becomes the reference for the analysis of system architecture approach. The quality attributes that are being analyzed are reliability, performance and usability. The results of this analysis are sensitivity points, tradeoff and architectural risk from each quality attribute scenario that are used as part of the system improvement recommendations.

Keywords: *RFID, software architecture, ATAM, reliability, performance, usability*