ABSTRACT

Information System major at Telkom Intstitute of Technology has courses database system which can be one of the chance to produce many Database Administrators so that it can meet the market needs in the field of Database Administrator. However, current learning process that takes place in the course database system is still not good. It can be seen from the results of previous surveys showing that only 13% of 30 students who have attended database system courses is able to understand the overall course material database system.

In this thesis, built Game Based Learning basic implementation for database system course. In this software, learning content delivered in the form of game that can increase student interest and understanding of the database system subjects in particular for the basic implementation of database. With this game, is expected to help the learning process in particular database system subjects on 4 main materials, such as Introducing of DDL (Data Definition Language) and DML (Data Manipulation Language), Query, PL/SQL (Procedure Language/Structured Query Language), Trigger. This game built using HTML5 technology and ADDIE instructional design.

In this research, functional and user acceptance testing have been carried out. The result of functional testing is that all functions in game can run well. Then, the result of user acceptance testing is that over 50% of 30 students agree that display quality, program interaction, user interaction and material presentation on game are good.

Keyword: Database System, basic implementation of database, ADDIE, Game Based Learning, HTML5, Database Administrator.