ABSTRACT

Baleendah 1 Senior High School has a library as one of the infrastructure facilities that

supports teaching and learning activities in schools. The library management of Baleendah 1

Senior High School in managing its data is still done with a manual and inefficient system, so

it takes a long time to record transaction data in the library. This study aims to design a digital

library that can be used to store data and process transaction data in the library of Baleendah

1 Senior High School.

This digital library design uses the Scrum method. The stages in this method start with

determining the Scrum team, then determining the product backlog by the product owner and

a sprint that is divided into six sprints. The features (product backlog) that will be created on

this system are master data features, visit features, circulation features, report features, and

others. At the end of the sprint, there is an inspection and adaptation phase of the sprint

retrospective (an opportunity to check and adjust the process). This system modeling using

through the Unified Modeling Language diagram. The system model is described into five

diagrams including ERD, Usecase Diagram, Activity Diagram, Sequence Diagram, and Class

Diagram.

After the system modeling is carried out, it is followed by system implementation. Feature

creation is carried out in accordance with the sprint planning. After the implementation stage,

system testing is carried out, starting with the system functionality test and the user acceptance

test. The features that have been made run well, and the system is designed to be accepted

according to user needs.

The result of this research is the digital library of Baleendah 1 Senior High School. The benefit

of this digital library is to assist the library in documenting library data. With the creation of

this digital library, it will make it easier for library staff to store library data and facilitate

circulation of teaching resources. Library staff can also monitor borrowing of teaching

resources that have not been returned and can find out the data of borrowers who are late in

returning teaching resources.

Keywords: school library, scrum, unified modeling

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