# ABSTRACT

Stephen Edlin / 48150251/2019 / Analysis and Design of Web-Based Library Service System at Tunas Karya High School/ Humdiana, S.Kom, M.M., M.Kom.

The library at Tunas Karya High School is a secondary school library that already has a library manager, has a number of book collections according to high school library standards, but has constraints in the current service process that is still conventional, ie all data collection is still written in the book and when searching for data what is needed must be to open the depth of the book, it causes a slowdown in data searching, circulation services or reporting. In the Tunas Karya High School library, there are constraints due to the lack of students' interest in reading at the school, which makes library activities not run well such as limited access time, library staff who do not enter, and the number of damaged books. So an efficient information system is needed for the needs of students and officers. With the creation of a library website application that helps students and officials find information about book data and the book lending process.

The analysis used in this study is the waterfall methodology. The programming technique used is PHP Hypertext Preprocessor, My Structured Query Language, Xampp

The method used for data collection by researchers is to use qualitative research methods. Data collection is done by making interview questions, making observations by going directly and looking at the object of research, and through literature study. While the method used to analyze the data is started using the data reduction method, then presents the data obtained properly so that it makes it easier to draw conclusions and make decisions. Then submit conclusions that will answer all problems in this study.

In building this Tunas Karya High School library system, researchers divided it into two libraries consisting of offline and online libraries. The offline library is used for the purpose of borrowing physical book transactions at school, while the online library is for electronic book lending that can be accessed by students and officials everywhere.

The conclusion that has been made by the researcher is that the library application has been made to overcome the problems that occur in this study, making it easier for students and officers to make the process of borrowing books without any place and time restrictions.

**Keywords:** Library Information System, Tunas Karya High School, Website