ABSTRACT

The library is a public place to look for books or just looking for references. However, since the COVID-19 pandemic, public accessibility has become limited, including access to libraries which are still conventional where visitors must come directly to the library. Digital library websites containing electronic book repositories can help people access information, so that the conventional library pattern needs to be replaced with a digital library. This study aims to develop a digital library website to provide solutions to the transformation of conventional libraries into digital libraries.

This research uses one of the agile development methods, namely extreme programming (XP). The extreme programming (XP) method is suitable for small-scale projects and only requires one to three people. In addition to the development method, an evaluation method is also needed to test the feasibility of the website. There are two evaluation methods that will be used, namely blackbox testing to test the interface and function of the website and load testing to test the capacity of the website for several users.

The results of the analysis of website design and design show two tests, namely blackbox testing issuing a success status on the function being tested and on load testing the website can accommodate about 1000 users simultaneously with a total of five errors. However, the website is still piloting using a free framework with limited display so that further global research is needed.

Keywords: Digital Library, Website, Application Development, Agile, Extreme Programming