ABSTRACT

E-learning is a technology that facilitates online learning. In addition to keeping up with the times, e-Learning also has several benefits for students, namely cost efficiency. This situation helps students save on transportation costs and pocket money. E-learning has played an essential role in various fields, including health cadres. During the pandemic and post-COVID-19 pandemic, the role of health cadres is increasingly essential. However, training or interviewing executives is no longer accessible as before the COVID-19 pandemic. Therefore, e-learning is needed for the training and discussion of health workers. The backend consists of a server, API, and supporting components needed to support the running of an elearning web application, known as the Back-End. In choosing a framework, there are undoubtedly many choices. Laravel is a web application framework with an expressive and elegant syntax. Laravel has laid the foundation for freeing developers to be creative without sweating the small stuff so that the author can focus on developing the application in a functional direction. This research will use the Iterative Incremental method for a more flexible development flow and quickly adapt to needs. This research has succeeded in developing a good backend based on unit testing running according to the API spec and load testing that has been carried out. It is concluded that the backend of the e-learning web application has met the needs and can be used. If the backend is appropriate, This research is implemented for application development on the frontend.

Keywords: Back End, E-learning, Iterative Incremental, Health Cadre