

ABSTRACT

Currently, many activities in the open are starting to be favored by various groups of people such as camping, mountain climbing, outbound, and so on. Based on a 2019 report, the Ministry of Environment and Forestry on the number of visitors to the conservation area for domestic tourists and foreign tourists reached 7,872,563 visits. Therefore, mountain climbing is one of the activities favored by tourists, but mountain climbing requires some careful preparation such as first aid in accidents and equipment that supports mountain climbing. The need for mountain climbing and is accompanied by a surge in the number of tourists, approaching potential users by using qualitative and quantitative aimed at gaining support data. Thus, Kegunung developed a mobile application for rental tools as a solution to the problem. However, the API is also one of the factors that must be considered in developing android-based applications because the API is used as a connection between the Kegunung tool rental mobile application and the database and also managing system functions. In this study, the development of an application programming interface for the Kegunung tool rental application on mobile devices uses an Iterative Incremental method. Then, unit testing and load testing were done which produces an appropriate response body and resulted in an average response of 2637 and 4833 milliseconds in a simulation of 50 and 100 users so that it can be stated that the Kegunung API application is in line with expectations.

Keywords: Kegunung, API, Mobile, Iterative Incremental.