

## ABSTRACT

Mountaineering is one of the most popular activities today. The enthusiasts are not only seniors but also beginners. Mountaineering is also one of the promising tourism sectors in Indonesia. In Indonesia, there are 129 active volcanoes. This number does not include mountains that are no longer active. Many people hike a mountain for various reasons. But mountaineering is not something that can be said to be trivial. There are so many important things that must be considered in mountaineering. Starting from the health aspect, the equipment needed, logistics, mental preparation, and also preparation of knowledge and information about the state of the mountain to be visited. It is not uncommon for novice hikers who lack knowledge of basic mountaineering and experience not to pay attention to these aspects. Which in turn will cause dangerous risks, such as hiking accidents and illness. This is the author's strong basis for developing systems and conducting a research entitled "Design and Implementation of Indonesian Mountaineering System Based on Android". This application is an application that contains mountaineering guides, and information related to mountains in Indonesia. This application is also equipped with the ability to access the location of Indonesian mountains and navigate to the mountaineering basecamp. This application was developed with the android operating system and uses the Java programming language. Uses Google Maps API technology to allow applications to access Maps. To run the Back-end, this application system uses Firebase as a database without a query and also performs account authentication.

**Keywords:** *Mountaineering, Android, Google Maps API, Firebase*