

ABSTRACT

The trend of mountain climbing is currently popular in Indonesia. This trend of adrenaline-pumping activities has led to an increase in the number of novice climbers on every mountain in Indonesia. Not a few cases of death on the mountain caused by accidents and lack of safety from climbing equipment. Mountaineering equipment is very important to ensure safety and comfort during climbing. There are many kinds of mountaineering equipment, because climbing mountains is like moving our homes to nature. Therefore, the tools and equipment needed, ranging from sleeping equipment, cooking equipment, to self-security must be maximally prepared. Based on records, there were a total of 116 climbers who died on the mountain from January 1 2013 to October 2022. Based on the above problems and the previous Smart Carrier Bag design product carried out by the Telkom University team in collaboration with Arei there were still some deficiencies, the author had an idea to designed a Smart Carrier Bag product based on RFID technology with a reminder feature for climbing equipment left behind to minimize accidents in mountaineering activities. Hiking equipment is inputted based on RFID sticker scanning technology and has a notification system on the user's mobile apps, so the user can find out what items are being carried and remind them of items left behind in real time.

Keywords: *mountain climbing, mountaineering accident cases, RFID*