

## ABSTRACT

Phobia is a psychological condition that can be physically or mentally damaging, even when the patient accidentally encounters the trigger of the phobia that is experienced, the patient will feel stressed, depressed, afraid or anxious. This final project aims to create an application system that can recognize whether the user has a phobia with VR-based applications, by utilizing the EEG Electroencephalography sensor with emotive tools, and also a website to display the user's diagnostic results. This VR application applies a scenario in the form of a 360 video containing 10 types of phobias. Testing in this final project is using the black box method and a questionnaire from the user. The results of application testing show that this application can help users to find out whether they have a phobia or not.

**Keywords:** EEG (Electroencephalography), fobia, Video 360, Virtual reality