

## Abstract

Earthquake is a natural disaster where the earth vibrates or shakes due to the sudden movement of rock layers on the earth's crust because of tectonic plates movement. Based on data obtained from the official website of the BMKG (Meteorology, Climatology and Geophysics Agency) in 2018, there were 11,577 earthquakes with various magnitudes and depths. This has an impact on the amount of damage to public facilities, houses, and a lot of victims ranging from infants to the elderly. The factors that cause a lot of damage and casualties are due to a lack of knowledge of the society about emergency actions during the earthquake.

The government has maximized the socialization of how to take an emergency actions during the earthquake, but it can't get the attention of all ages in the society. Lately, children and teenager are not interested in reading and attending earthquake socialization anymore, that's because their interest is more likely to play video games which can take direct action in the game world.

Video games are now popular among the publics starting from children, teenager to adult. They love various types of video games especially battle-royale, simulation and resource management genre which have 3D animation graphics.

Based on the problems above, a 3D simulation game was made for provide an education through game about how to take an emergency actions during the earthquake, the genre of this game is resource management survival which is expected can reduce the number of earthquake victims.

**Keywords** : earthquake, education, 3D games, simulation