ABSTRACT

One of the roles of zoos is as a means of education, where one can get to know life firsthand. The benefits of education at zoos are to increase knowledge, introduce various types of animals and produce research or research for people's lives. However, one of the controls when in the Zoo is that visitors rarely see animals that move freely and do not see their overall body shape because there are some animals that are dangerous and cannot be touched carelessly. In addition, the information presented on the information board is very limited, so the educational information that visitors get is also limited.

With these problems, the idea arose to create an application system that could help as a medium of education in an interesting way, especially in providing information about the animals in the Zoo by implementing Augmented Reality (AR) designed in Unity 3D software. Augmented Reality (AR) uses a marker as a detection medium to run the Augmented Reality (AR) system, so that visitors can point the camera at the marker and perform scanning, then on the smartphone screen using an Android-based application an object will appear in the form of 3D animation, sound and information about these animals.

Based on the test results, the application system can run on several mobile devices using Android from version 5.1 lollipops to Android version 10. Based on the test results the marker used will be detected more quickly if the tilt angle is at a 0^o angle with a distance of 20-40 cm and gets lighting. outside the room.

Keywords : *Augmented Reality, Marker, Animal, Zoo, Unity 3D.*