ANDROID BASED AUGMENTED REALITY APPLICATION FOR INTRODUCTION TO BALL SPORT (CASE STUDY AT NGEMPLAK NGANTI STATE PRIMARY SCHOOL, SLEMAN)

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ABSTRACT

Sport is a physical activity carried out by humans intentionally or planned with the aim of making the body healthy, providing positive energy, and some use it as a hobby. One sport that is quite popular with many people is ball sports. Ball sports are divided into two, namely big ball sport and small ball sport. Some people still don't know this sport well, therefore, to make learning easier, interesting learning media innovations are needed that follow current technological developments, namely learning media using augmented reality or AR. Augmented reality can allow users to see 2D or 3D virtual objects in the real world in real-time using an Android smartphone camera. The method used is the marker-based tracking method or using markers to display 3D spherical objects. Designing this application requires data collection techniques such as using literature studies to search for information on football sports material, Unity 3D to design the application, Vuforia SDK as a database, C# programming, and an Android smartphone to run the application. This augmented reality application for introducing ball sports contains information about ball sports material, and there is also a fun quiz menu to hone the user's learning skills.

Keywords: Big Ball Sports, Small Ball Sports, Learning Media, Augmented Reality, Unity 3D