

## Abstract

Learning cultures and geographical of Indonesia today still often using ordinary atlas book that can only display text or image. A flexibility of *smartphone* can be used as a more interactive learning media. Augmented reality (AR) is a technology that can incorporate elements of the virtual world into the real world in realtime. with an adequate computing of *smartphones* to run AR applications, AR technology can be implemented for the learning methods of geographical and Indonesian culture, with display other elements except text and images in the atlas books. Arindi is an application of learning culture and geographical Indonesian using AR technology that runs on Android *smartphones*. Arindi application can display 3D objects and sounds in the atlas books like native house, town marker, and folk songs. 3D objects and sounds may appear and be heard on a *smartphone* with a camera that directed on the map in the atlas-arindi. In addition to AR technology arindi applications can provide information about the culture and geography in Indonesia at digital encyclopedia future.

**Keywords:** android, atlas, *augmented reality*, *digital encyclopedia*, *3D objects*, *smartphone*.