## **Abstract**

Jaipong dance is a traditional Indonesia dance, originates from West Java and is a national cultural heritage. Introducing dance in early childhood (elementary school level) is one way to maintain and preserve regional culture. However, the limited learning time (fewer study hours) caused the material to delivered less in-depth. So that students feel bored, demotivated, and miss some vital information about the material. Learning activities through mobile-based learning media is one way to relieve boredom, which improves student learning outcomes and motivation. This study aims to build a mobile-based learning application for Jaipong dance learning activities at the elementary school level using the User-Centered Design (UCD) method. UCD is a method that can analyze user needs according to user characteristics. The evaluation involved 15 students at a public elementary school in Ciamis, West Java. Participants were asked to answer a quantitative survey using the Quality in Use Integrated Measurement (QUIM) instrument to determine their experience of using the application during Jaipong dance lessons. The test results on the benerfits and usability of the application get an average score of 91%, included in the "excellent" category. The results are supported by the results of user learning on the understanding of Jaipong dance. As many as 86,7% of users who use the Jaipong dance learning application understand learning well. In contrast, user who do not use the Jaipong dance learning application (using YouTube media) are 33,3%. This paper shows that the UCD method contributes to the design process according to the needs and characteristics of the user to design the user interface of the Jaipong dance learning application.

Keyword – Mobile application, user interface (UI), User Centered Design (UCD), Quality in Use Integrated Measurement (QUIM).