## **Abstract**

Sholat is a religious pillar that should be studied and understood by all Muslims. By studying and understanding the correct way of praying from early on to make someone who is Muslim can uphold the obligation of sholat which is the 2nd pillar of Islam. Sholat learning in early childhood requires a lot of help from teachers and parents, because children need direction to understand the prayer procedures that have been taught by Rasulullah SAW. Based on interviews with child psychologists, the subject of early childhood learning has a cognitive aspect, in which children in the 4-6 year age range (Preoperational period) have the ability to think concretely by seeing things in real. So to teach something to young children need to show it clearly because early childhood can not think by imagining something that has never been digested by their senses. By optimizing Augmented Reality technology in smartphone applications can display 3D models that are very suitable with the cognitive learning patterns of children at an early age. This research is done by Children-Centered Design approach to get user perspective in developing this application. Testing of application prototype using QUIM (Quality in Use Integrated Measurement) model. The User Interface model generated from analysis that will be implemented into sholat learning application named after "Belajar Sholat bersama Ali" with a good usability level. From data testing has done, the result for each category is low persona (84.6%), mid persona (91.71%), dan high persona (95.00%). With that usability point the application of sholat learning in mobile devices can be used as an alternative to children's learning.

Index terms : early childhood, user experience, quality in use integrated measurement, children-centered design, preoperational, augmented reality, sholat