## DEVELOPING APPLICATIONS OF CROSSWORD PUZZLE FOR LEARNING MEDIA OF SCIENCE FOR ELEMENTARY SCHOOL WITH EXTENSIBLE MARKUP LANGUAGE (XML) ANDROID BASED

By

## SHIDIQ CAHYO ARIANSYAH 12030023

## Abstract

Specifically, a survey by Indonesia Hottest Insight states that most smartphone users among children are actively involved in playing games. In order to make students more interested in learning science lessons, then it supposed to make an Application Crossword Puzzle that can stimulate and trigger the students appeal in learning science to support the learning process. This application is conducted for elementary school especially for sciences. The basic design of this educational game using logic modeling tools such as creating UML (Unified Modeling Language). System programing is made into the Android Studio language program using android platform. The result is a crossword puzzle application consisting of two parts namely TTS Builder used by the teacher and TTS Player used by the students. Testing is conducted using questionnaire and calculated by Likert-scale method with TTS Builder result is 80% which entered in category "Strongly Agree".

Keywords: Extensible Markup Languange, smartphone, Android, TTS