

## **ABSTRACT**

Android is an operating system for mobile phones. Android provides an open platform for developers to create their own applications that can be used by a variety of mobile devices. Android has many advantages as a software that uses computer code base that can be distributed openly (open source) so that the user can create a new application in it. The rapid development of android devices made many outstanding gaming applications, one of its Guessing Words.

Guessing Words is a word guessing game that requires players thinking ability to guess a secret word by guessing the letters one by one. The secret word is stored in a list of words. A word will be selected at random from a list of words in a category that has been selected by the player. The player and the computer will guess the words in the English language letter by letter until the word is successfully guessed or player and the computer runs out of chances to guess. Backtracking algorithms are used for artificial intelligence computer will look for the letters that correspond to the secret word. Backtracking algorithms will find solutions based on space available in a systematic solution, then generating the node of the solution which close to completion.

Based on the alpha testing, Backtracking algorithms are implemented on a computer has been successful because it got a success rate of 80%. In addition it is seen from the results of studies of beta, Guessing Words game interesting to play, it has information that is educational, and the computer is smart enough to guess the word letter by letter from a secret words.

**Keyword:** Android, Guessing Words, Backtracking Algorithm