CHAPTER I
INTRODUCTION

1.1 Background
Scrabble is a board game construct words. Scrabble consists of squares measuring 15x15 with a bonus value. Each letters in Scrabble has a value in accordance to the rule. Players try to get the highest score from the construct words. There are many rules of scrabble depend on the language version. Scrabble can be played from 2 to 4 people.

On scrabble game, sometimes player who know just few of vocabulary will be difficult to play. Also player do not get the maximum value because just know few of vocabulary. More vocabulary known by player more easier to played.

To help player play scrabble needed a cheat for scrabble game. This cheat will help player to learn more vocabulary. Also cheat can provide recommendations based on condition of board and letter from player.

1.2 Scope
This project will be made in desktop application with Java programming language. Algorithm for this project using GADDAG algorithm and Trie as data structure. Scope of this project is:

1. Give maximum points from a condition of board and letter left in hand.
2. Implement cheat for game Scrabble.

1.3 Objective
The objective from the this project are:

1. Knowing GADDAG algorithm to find all the words that can be formed from the several letters efficiently.
2. Implement Trie data structure to store word