

# **CIS 2168: Assignment #7**

Due on Tuesday, October 28, 2014

*11:59pm*

**Anwar Mamat**

## Problem 1

### Boggle Game (100%)



Figure 1: Boggle Game

As shown in above image, boggle game is a word game, in which a player attempts to find words in sequences of adjacent letters. Your program searches for words that can be constructed from the letters of sequentially adjacent cubes, where "adjacent" cubes are those horizontally, vertically or diagonally neighboring. Download the attached BoggleGame.zip file, extract it and open the BoggleGame project using NetBeans. Implement the "findWord" method in the BoggleGame class. The method receives a key word as an input and search for the word. Finding the word in the letter matrix is similar to finding the path in a maze. If key word is found, the method returns true. It also constructs path, so that the word path can be painted in green. If the word cannot be found, then it return false. The given method return a path for the word "super".

## What will you learn from this assignment

Queue, Stack, Recursion, and Backtracking

## Grading

Homework is 100 points. 80 will reflect functionality and correctness. 20 points on your program will reflect your programming style, documentation. **If you code does not compile, you will not receive any credit.**

## Commenting and Documenting Code

Code must be properly commented. The main idea is that the grader should be able to understand your code easily, not have to tear his or her hair out wondering what some statement is doing. The first time you

have to deal with poorly commented code (if you haven't already), you will understand how annoying it is. In particular, the top of each code file should contain your name, the course and assignment numbers, and a brief summary of what's in the file. Line-by-line comments should be included as necessary to make the code easy to read. A clear coding style, together with informative variable and function names, will reduce the number of comments required. Obscure code or cryptic function names will cause loss of points (for bad style) and also require more extensive comments.

## What to submit

A single zip file called Assignment7\_firstname\_lastname.zip, where firstname is your first name, and lastname is your last name. In this zip file, put:

1. Java source
2. A README file with:
  - Instructions to compile and run of your code (include a description of command line options).
  - If your solution is not perfect, explain what parts you did and what part you did not do.
  - List of files submitted
  - All your data and results (in plain text files).
  - Anything else you want TA know
3. Submit this zip file to Blackboard