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| School of Computing  Faculty of Engineering |

Replacing the obsolete ABSP ratings system with an interactive online database

Gavin Dawson

Submitted in accordance with the requirements for the degree of  
BSc Information Technology

2014/2015

The candidate confirms that the following have been submitted*:*

*<As an example>*

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(Signature of student)

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# Summary

Concise statement of the problem you intended to solve and main achievements (no more than one A4 page).

# Acknowledgements

Myself…

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# Background

## Problem

## Solution

## Aim

## Scrabble

Scrabble is an American family board game, which was trademarked in 1948 and is currently owned by Hasbro. However the game has gone through much iteration and was originally invented in 1933 by Alfred Mosher Butts under the name of Lexico and later Criss Cross Words.

It wasn’t until Butts met an entrepreneur called James Brunot that the game’s rules and design were refined. It was also then that the name Scrabble was trademarked and the game was widely distributed.

The game uses anagrams created in a crossword puzzle format and is played between two and four players. Players take turns spelling dictionary words on a game board using letter tiles, which are placed either vertically (top to bottom) or horizontally (left to right). Each letter tile also features a numerical value, which determines how many points a letter is worth. Letter tiles values are assigned in a way so that the less frequently a letter is used in the language of the game that is being played then the higher that tile is worth. For example, in the English language the letters Z and Q are examples of the least frequently occurring letters used in words and both reflect this as being worth 10 points in the English language version of Scrabble.

A player receives the sum total of the values of each letter tile used in the construction of a word. The aim of the game is to finish the game with the highest possible score, which is achieved by creating words that either use a large number of letters or that use the tiles that are of a high value.

At the start of the game each player is assigned seven random letter tiles, which they must use to create a word on the board during their turn. Each time a player uses letter tiles to create a word they receive the same number of letter tiles at random at the end of that turn to ensure every player starts their turn with seven tiles. This process continues until there are no more tiles remaining in reserve.

With the exception of the first word played on the board at the start of a match, each new word constructed must contain at least one of the existing letter tiles on the game board. In addition to this, any contact that a player’s letter tiles make with any additional letter tiles must spell a valid word. At no point in a match must an invalid word be created from any move.

Scrabble is sold throughout the world in many formats including the classic board game, junior edition, travel edition and electronic games. I the United States, three out of five homes contain at least one of these iterations.

## The Association of British Scrabble Players

## Player ratings

## Calculating player ratings

# Requirements

# Design

## Database design

### Background of databases

### Database design (ER diagram, discuss what is already in place)

## Interface design

### Background of interface design

### Interface study of similar systems

# Implementation

## Justifications

# Evaluation

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# List of References

SCRABBLE. (2015) Hasbro. [Online]. Available from: http://www.hasbro.com/scrabble/en\_US/discover/history.cfm [Accessed 12 Feb. 2015].

# Appendix A - External Materials

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# Appendix B - Ethical Issues Addressed

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