

MASTER MIND WRESTLE

Abstract

Master Mind is a code-breaking game for two players where one player is the codemaker and the other the codebreaker. The codemaker shall generate a hidden code for the codebreaker to guess. After a guess is made, the codemaker shall provide feedback as to how many codes were correct in terms of their value and position. Master Mind Wrestle consists of a Graphical User Interface (GUI) where user gets to choose to be the codemaker or the code breaker. As a computer opponent to the user, it is required to develop the engine to function as both the codemaker and the codebreaker.

Introduction

A 5-year study involving 488 people age 75 to 85 found that, for the 101 people who developed dementia, the greater the number of stimulating activities (reading, writing, doing crossword puzzles, playing board or card games, having group discussions and playing music) they engaged in, the longer rapid memory loss was delayed.

Objective

- (a) To transform a classic educational and mind-stimulating game into a computer application
- (b) To reduce the incidence of dementia and rapid memory loss through engaging minds to maintain a healthy state of mental well-being

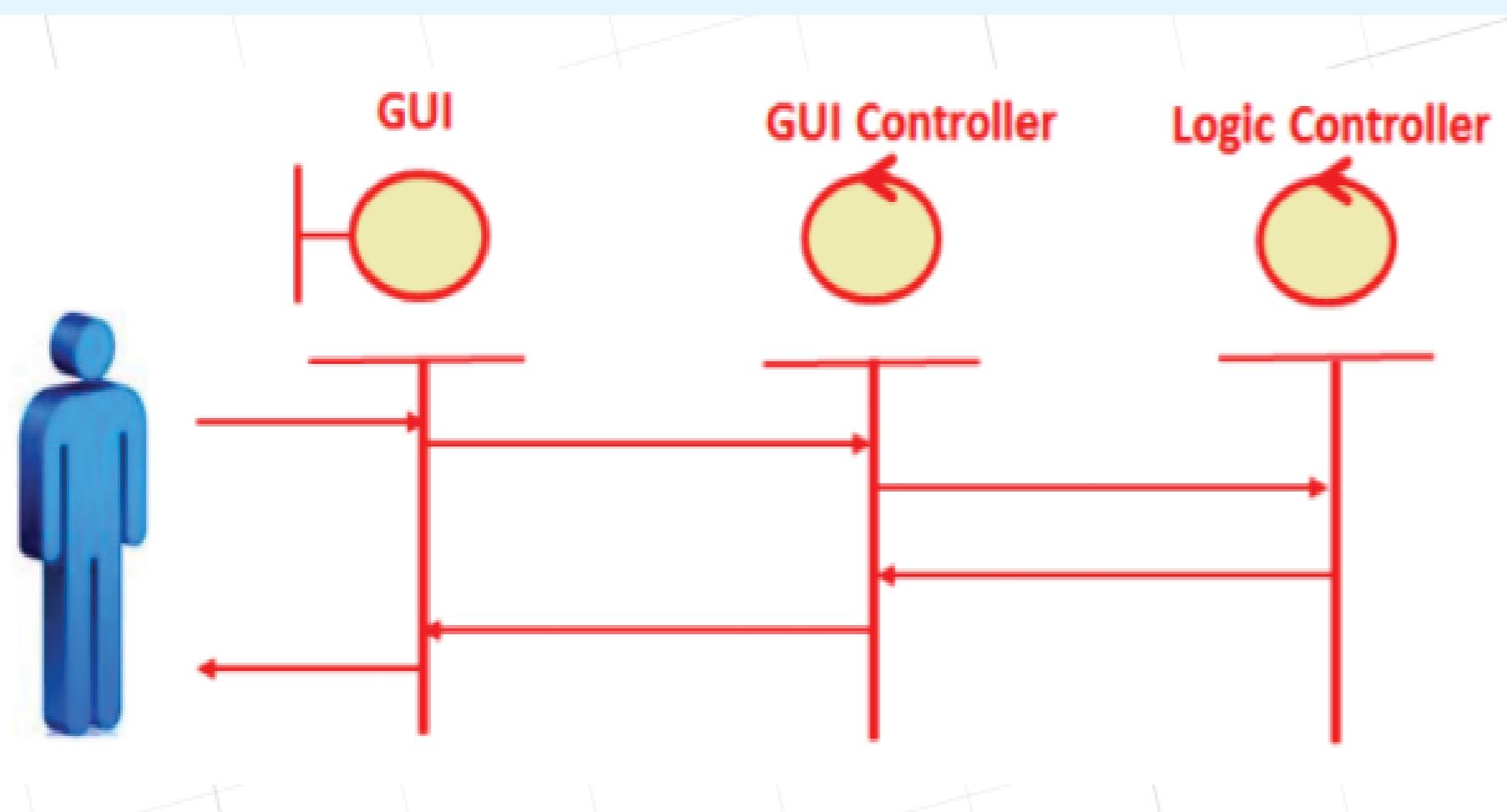
Methodology and Development

Tools: Visual Studio Express 2010 Integrated Development Environment

Programming Language: Microsoft C#

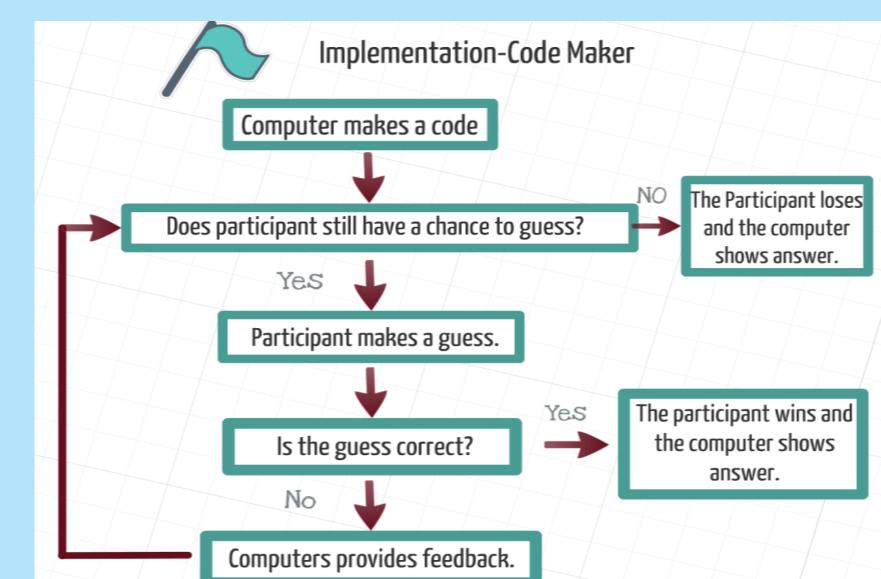
Framework Design:

- (a) Graphical User Interface (GUI) : This component is in charge of the design for the application.
- (b) GUI Controller: This component governs the GUI controls. It is the translating results from logic controller to Graphical form to user
- (c) Logic Controller: This component performs the analysis of the user input



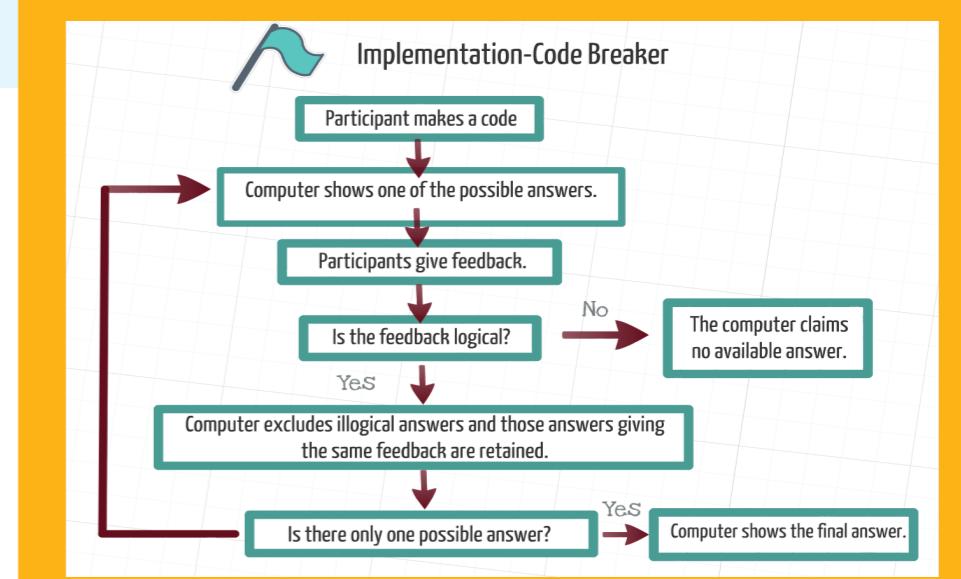
Code maker

Computer comes up with the code. Player generates answer



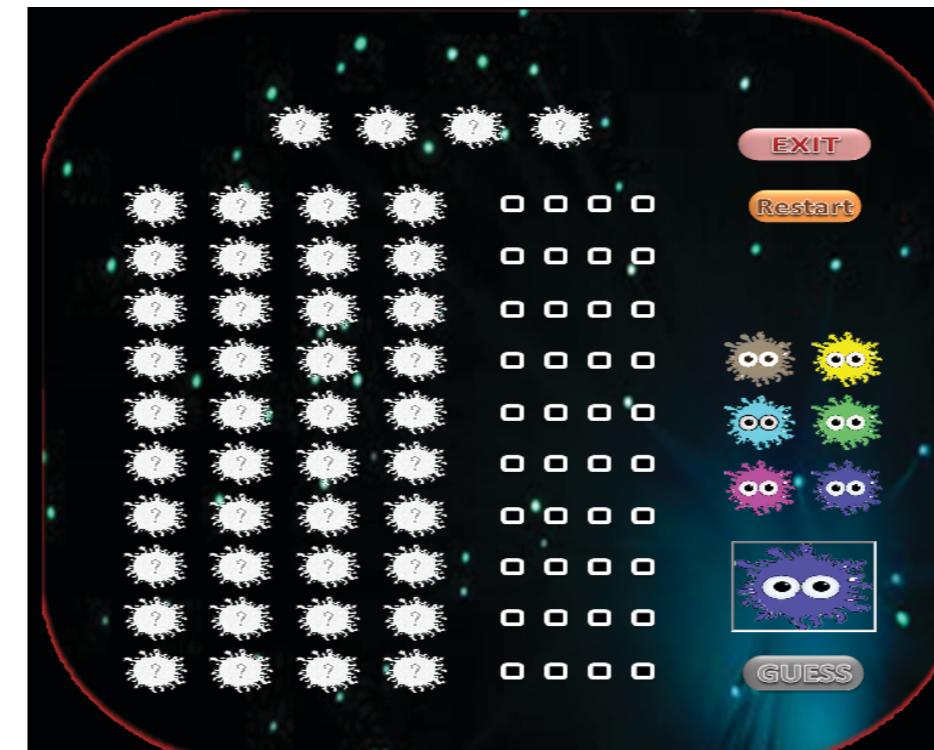
Code breaker

Player generates code
Computer guesses the answer



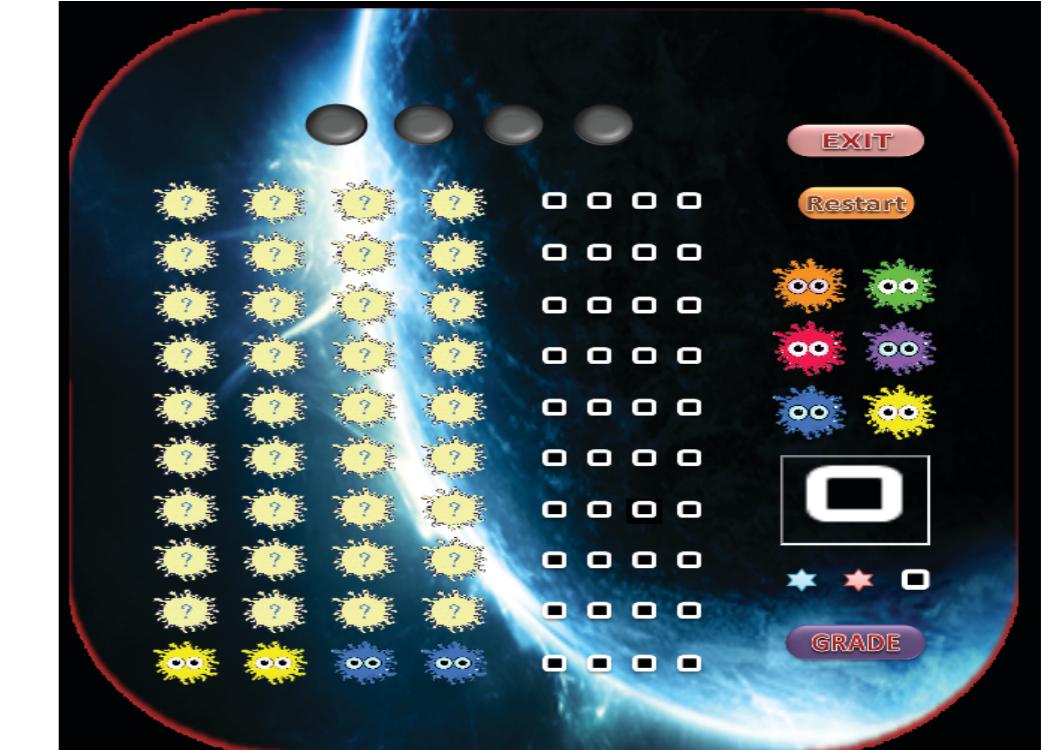
Conclusion

Based on a trial of forty games, our codebreaker require a mean of 5.3 attempts to obtain the correct answer or to break the human code.



Code maker

The computer will generate an answer randomly. Players need to fill the blank cell row by row, using the colorful cell on the right. When the computer receives your guesses, it will give you feedbacks on the right showing in the blank square.



Code breaker

Players should generate an answer in their mind. The computer will try to guess. When you see the guesses done by the computer, you should give the computer feedbacks using the stars and squares. Then computer will try again.

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