EQUATION GAME

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# 1 Analysis

## Problem Definition

There is a resounding desire, in today’s society, to have a more logical and intellectual mind- particularly in parents who want their children to have advantageous analytical skills, students who have to sit aptitude tests for university admissions or in a hiring process, and simply individuals who want to keep their minds in shipshape. This desire can easily lend itself to a computational solution, using a ‘brain game’. The way my game displays an achievable, desired ‘answer’, along with some other numbers/operations to choose from, compounded with the rules and other limitations, and subsequently waits on the user to achieve the desired number with the displayed numbers and operations, keeps one’s mind active and healthy while also ameliorating their logical skills and problem-solving skills.

My *Equation Game* is not only didactic but it’s also fun… meaning that many children would (and have) independently decide to play this game in their spare time. There are many brain games alike this (for example, crossword or sudoku) however my *Equation Game* is, in itself, a different game although, it has its similarities; it closely resembles the television show and programme *Countdown* (but with its own twist).

## 1.2 My Clients

The clients and demographic for this game would be players (with different experience) of computer games, children and their parents, and students who will be sitting university admissions tests (UATs)/aptitude tests. Due to this range in my market, the stakeholders will be a representative sample, ranging from children whose parents want to keep their developing minds active, to older students (17+) who would like to exercise their logical skills, and then an older demographic who might use the game as a pastime.

The young children I have sought are children who have played games before and are used to such technology, thus wouldn’t struggle with picking it up. Similarly, I sought people who are familiar with games and would also grasp it with ease.

Prince and Aakash, aged 6 and 5 (respectively), are my youngest clients and have both grown up surrounded by technology and with accessibility to *iPad* games etc. Chris and Sean are my older clients; Chris of which is an experienced gamer who is preparing for his mathematics-based university admissions test and would like to use my game to do so; Sean is an experienced gamer who would like to use my game for leisure purposes. Paul and Safe are my oldest clients (both of ages around 50) who are both looking to take up my game recreationally; Paul is retired and would like to use my game as a precautionary measure for boredom prevention; Safe is an older, experienced gamer who would use my game to take the edge off.

Why it is suited to a computational solution

# 2 Design

## 2.3 Interface Design

### 2.31 Main Menu Scene

### 2.32 Game Scene

### 2.33 Paused Menu Scene