

CALIFORNIA STATE SCIENCE FAIR 2017 PROJECT SUMMARY

Name(s)

Ziyad Soliman

Project Number

J0815

Project Title

Train that Brain

Abstract

Objectives/Goals

The objective of this project is to develop a computer program application to help people diagnosed with Attention-Deficit Hyperactivity Disorder (ADHD) to strengthen and prolong focus and attention.

Methods/Materials

Downloaded a software called Unity to create the app. Programmed the Main Menu on the first screen. Created buttons that the user clicks to transfer to different screens. Developed a screen for each game where each subsequent screen corresponded to a game. After creating all of the games, the Main Menu was linked to all the screens and then an exit button was created for each screen except the Main Menu screen. A 15 second timer and a scoreboard to calculate the score for all the games were created. Finally, an unlock\lock system was devised to unlock levels when successfully completed.

Results

As the results for creating an application consist of runs, many runs were taken. Levels were unlocked when the user effectively completed a previous level. The application was successful and was able to accomplish its task.

Conclusions/Discussion

This application allowed the user to successfully play five brain training games to improve focus and attention. After selecting the desired game from the Main Menu, the user played the game under the constraint of a timer. If successful, subsequent levels were unlocked. Otherwise, the user may choose to try again or to play a different game.

Summary Statement

I programmed a brain training application to help people diagnosed with ADHD to strengthen and prolong focus and attention.

Help Received

My computer science teacher, Ms. Najwan Nassereddin, honed and refined my programming skills.