Criteria A

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# Problem:

Daphne Bavelier, the client, is a brain scientist, who is inclined in learning how the brain functions and wants to create a way for the brain to get smarter, faster, and overall, better. She sincerely feels that video games are the key to unlocking our brains potential. Therefore, she wants to create several games that explore the ideas that attract and stimulate the brain’s capacity to think. These games will run on easily-available computers. The target audience of this experiment are human beings of all ages.

Parents believe that whenever their children play video games, it is a waste of valuable time. The results from Bavelier’s experiments show otherwise. Playing video games have many beneficial effects to children. Enhanced vision and greater focus are just some of these examples.

The problem that Bavelier’s team faces is that, “what we need is really a new brand of chocolate, a brand of chocolate that is irresistible, that you really want to play, but that has all the ingredients, the good ingredients that are extracted from the broccoli that you can't recognize but are still working on your brains.” [[1]](#footnote-1) The broccoli in this context represents education games whereas the chocolate represents games that children prefer to play. The challenge for Bavelier and her fellow scientists is to create an educative game which excites and engages children. This will in turn, enhance the minds of future generations.

# Research Plan:

In Bavelier’s Ted Talk she highlights the key issues that need to be resolved. There should be a “chocolate side” 1 for the game.This will cause the games to be appealing to the eye. In addition to that there should also be an element of learning, the “broccoli side” 1. She identifies what makes a good game. The game should incorporate “the good ingredients that are extracted from the broccoli” 1 and the appealing aspects of the chocolate. The game should be created in such a way that the player only sees the chocolate and none of the broccoli while in essence, the game is actually all broccoli and no chocolate.

# Inspiration Pieces:

The games that are essential to the success of this experiment are ones that challenge the mind. There are many game developers that take this in to consideration. One such example is Lumosity, which develops games that enhance the brain’s cerebral functions.

The game can be based on a storyline that is similar to Mission Impossible/James Bond story. The game should stretch the brain’s muscles and should engage the users.



Pinball Recall ([[2]](#footnote-2))

This game could signify a point where the user must stop a missile (this can be represented using the ball) and the user has to find the end point, thus saving the world.

The game will be created like the TicTacToe game that was created in class. The end points can be symbolized using a letter on a grid. And the white bars can just be forward and backward slashes.



Memory Matrix ([[3]](#footnote-3))

This game can signify when the player has to remember a keypad code that was keyed in by the enemy so that the player can get into a locked room.

Again this game can be based on the code of TicTacToe, where the keypad is a grid, and the player had to remember the number that are keyed in.



Finding Hope ([[4]](#footnote-4))

While an enemy is running away from the player, this game will have the player trying to locate the player. There will be a grid system used, where the player inputs the coordinates of the enemy’s location.

1. Bavelier’s Ted Talk, https://www.ted.com/talks/daphne\_bavelier\_your\_brain\_on\_video\_games/transcript?language=en [↑](#footnote-ref-1)
2. Lumosity’s Pinball Recall, http://www.lumosity.com/press/resources [↑](#footnote-ref-2)
3. Lumosity’s Memory Matrix, http://chuang.pro/archives/2268 [↑](#footnote-ref-3)
4. Finding Hope (game), http://www.bigfishgames.com/games/5960/finding-hope/ [↑](#footnote-ref-4)