Game Proposal: Educational Geometry Dash

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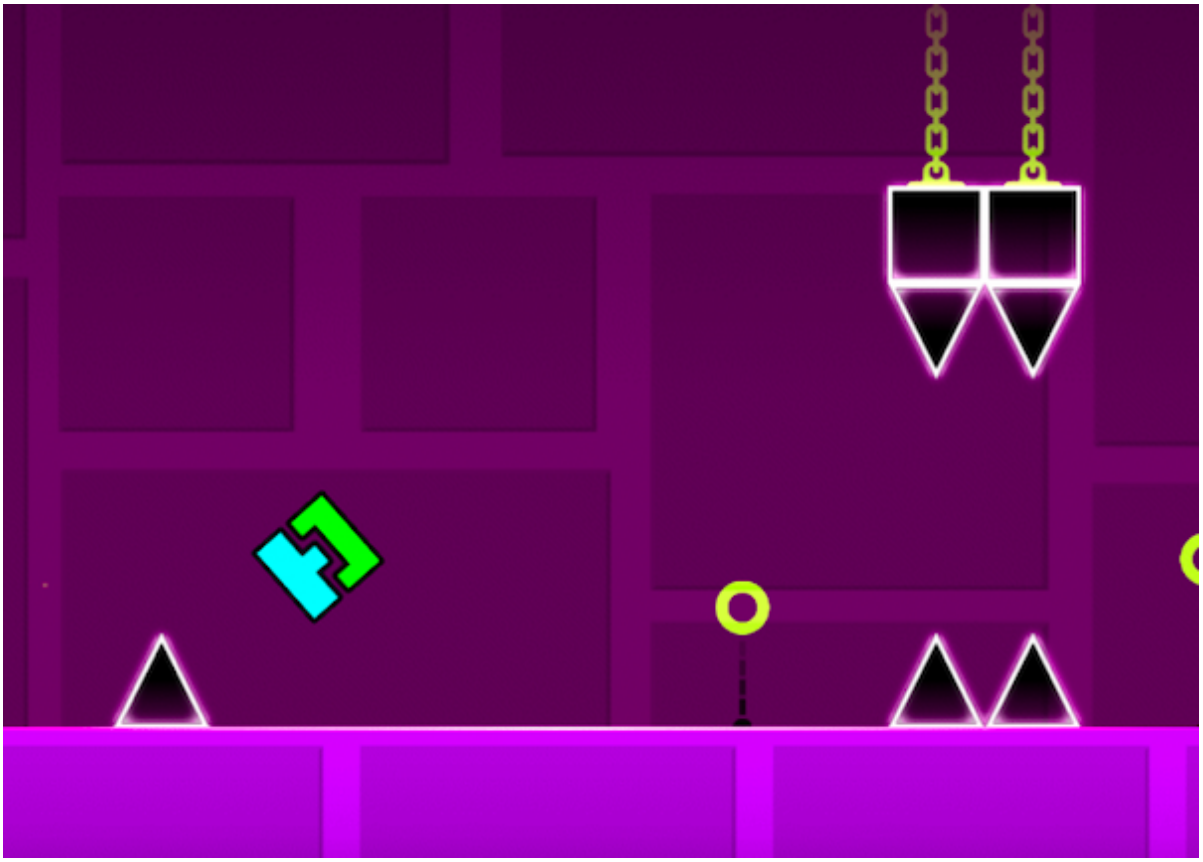
This proposal is not to introduce a new game but to suggest a way of expanding the potential of the existing game, Geometry Dash. While playing Geometry Dash, I found out that this game can be used for an educational purpose if updated in a way implemented in this proposal.

Geometry Dash is basically a game where players control the move of the ball and make it arrive at the destination point of the 1D line. If you press the screen, the ball jumps, and otherwise, the ball keeps sliding through the line. The key point of this game is to take a jump at appropriate timing.



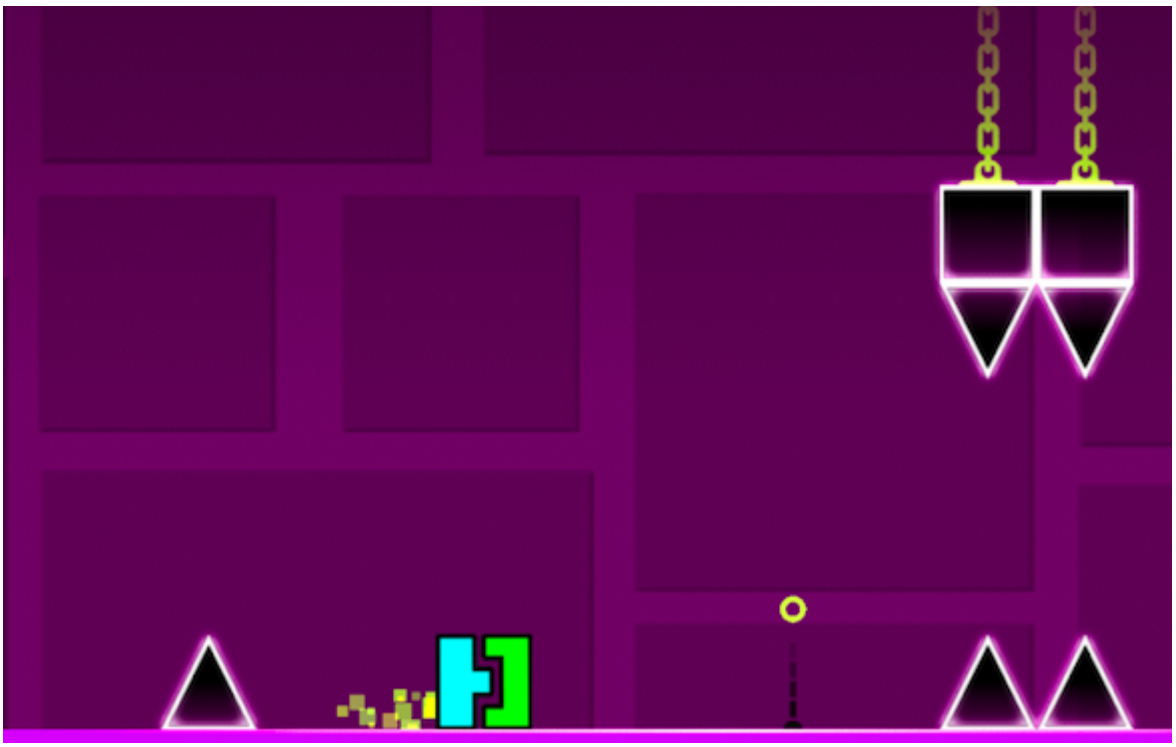
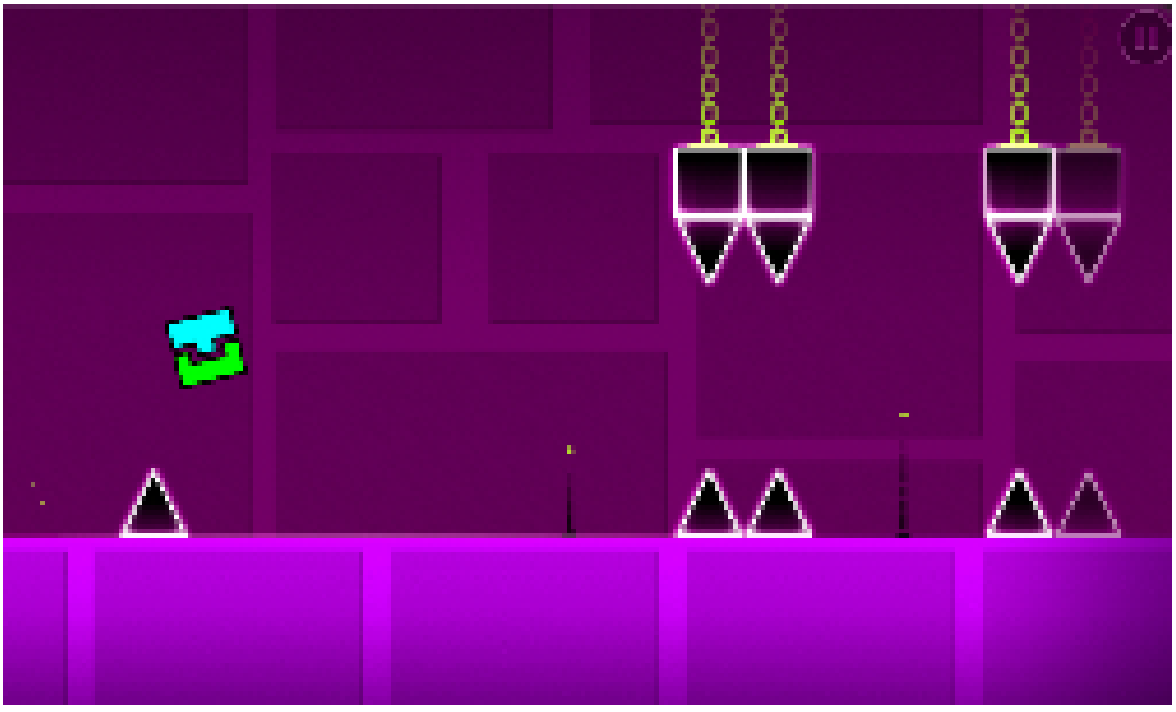


Figure 1 : Pictures in figure 1 shows that the square lands at its line.



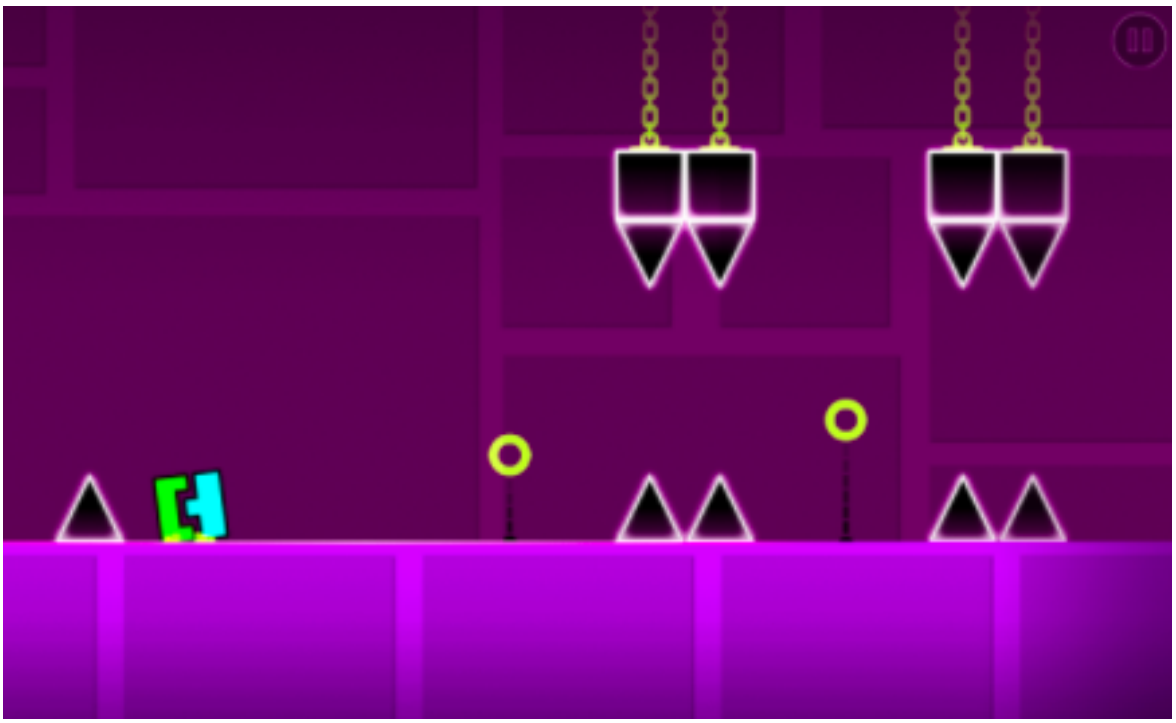


Figure 2: Pictures in this figure shows that the square lands at its edge.

As seen in those pictures, when the square takes jumps, it arrives at its edges or lines. This implies that if the distance between each edge gets shorter, the figure can make finer jumps, which puts players on ease to control. For example, a circle, which has an infinite number of edges, would be able to make the finest moves. Also, if the distance between each edge gets longer, the figure can make a big jump, which reduces the need of taking a jump at appropriate timing to avoid obstacles. Both geometrical features have their own advantages, and players should be able to exploit those. Therefore, Geometry Dash should provide a variety of geometrical shapes of figures available so that players get to take those geometrical features into consideration to build the strategy.

Also, it should allow the player to spontaneously draw a geometrical shape while playing the game. If the player meets a very complex design of obstacles, the player can use the creative mod, which allows them to stop the game for a few seconds. During those

seconds, on the draw pad that pops up after the player pressing the “creative mod” button, players get to draw their own unique geometrical figure which allows him to easily pass up the obstacles in the path shown below.

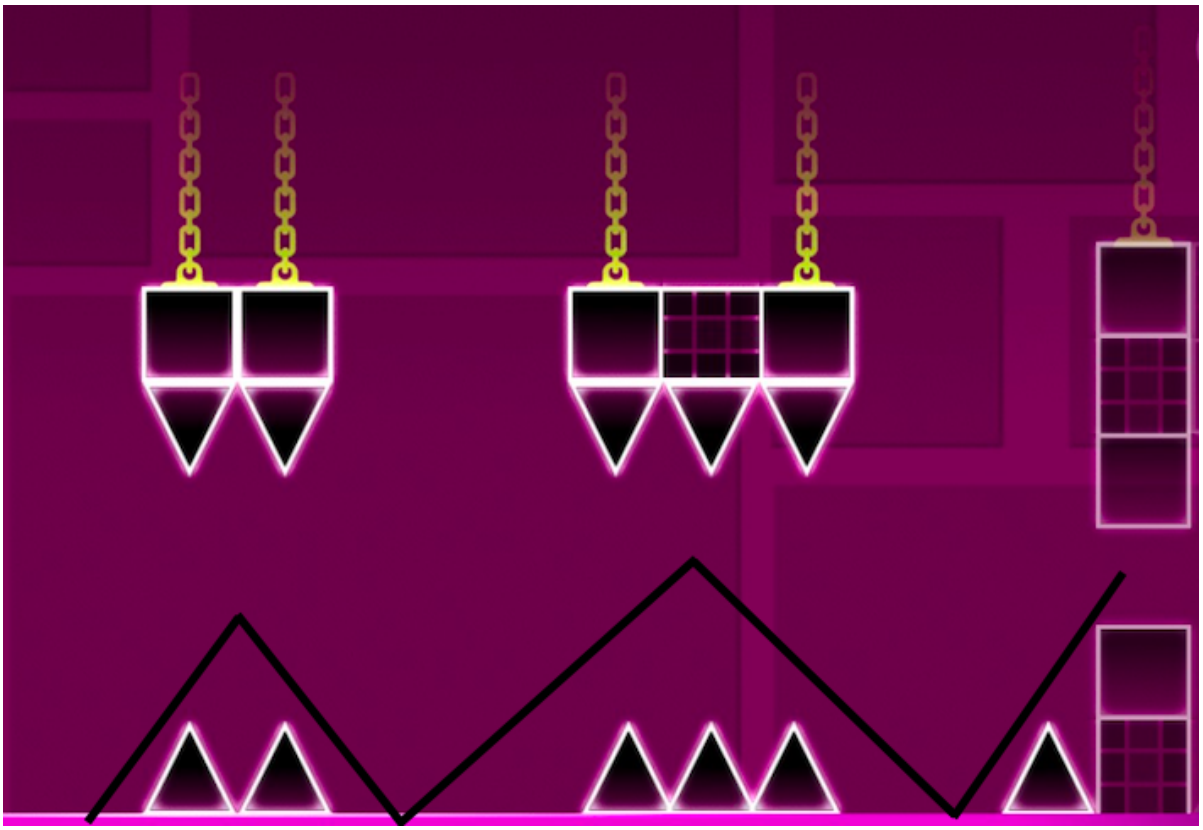


Figure 2: To reduce the need for finding appropriate timings of jump, which is fairly hard to do, a drawn geometrical figure should be able to avoid the obstacles by jumping 3 times in a row..

Since the width of the first jump is relatively small, the length consisting of the starting edge and landing edge should be smaller. The width of the second jump is the longest, so, following the same logic, the length between two edges involving the second jump should be the longest. At last, the width of the third jump is the shortest, so the length between the starting edge jumping from the end of the second obstacle and landing edge

arriving at the start of the third obstacle should be the smallest. Therefore, the geometrical figure for avoiding such map of obstacles could be:

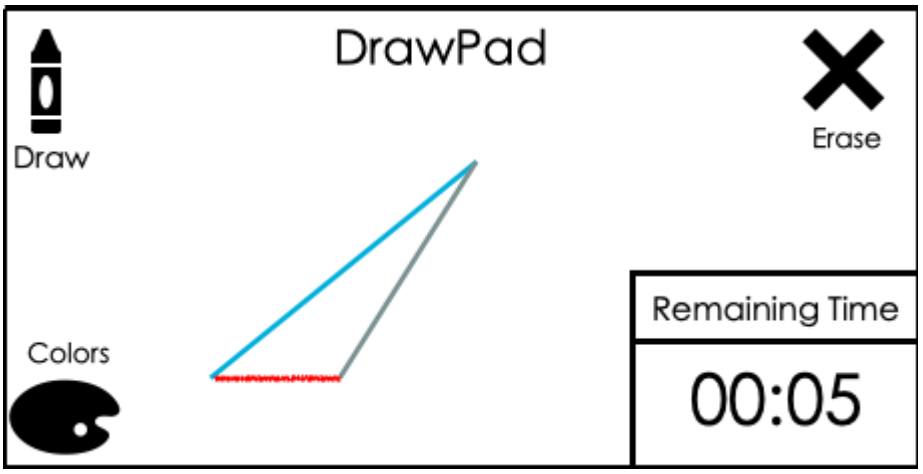
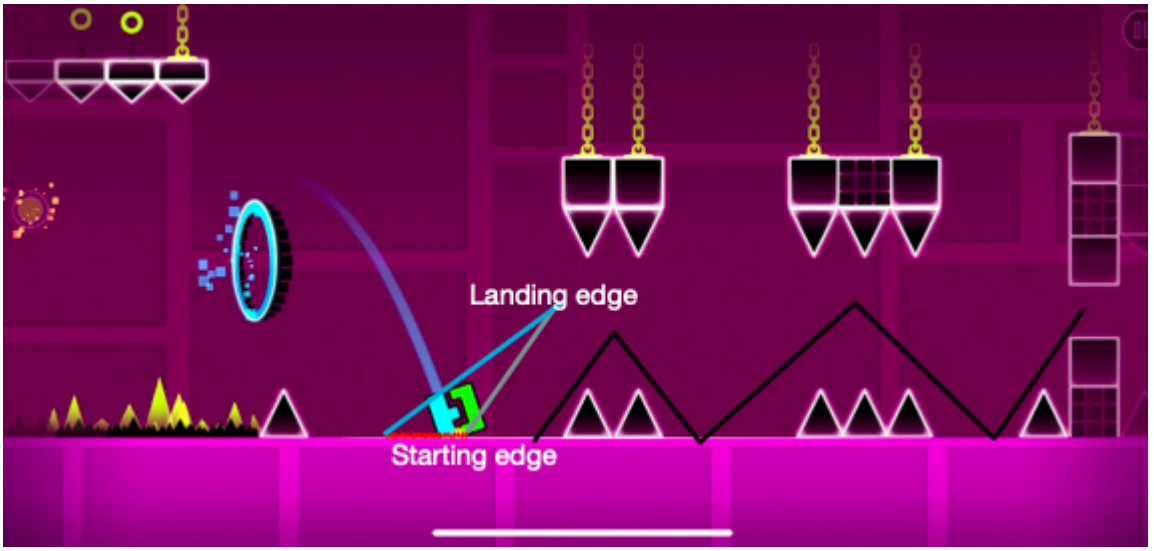


Figure 3: This figure shows the example of a geometrical figure in a briefly-sketched draw pad.



Since players get to conceive the geometrical figures that fits the features required to avoid the obstacles, players may be able to improve their spatial sense.